

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 11, 2004, 15:24:27 ; Search time 18.8426 Seconds

(without alignments)  
2295.997 Million cell updates/sec

Title: US-09-927-315-9

Perfect score: 4443  
Sequence: 1 MGPRKATCSLFFILMWLAE.....ERNTPAYNSMIGYTRRD 838

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:  
1: /cgn2\_6/ptodata/2/1aa/5A\_COMB.pep:\*  
2: /cgn2\_6/ptodata/2/1aa/5B\_COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A\_COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B\_COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/6C\_COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3514	79.1	669	4	US-09-361-631-7 Sequence 7, Appli
2	3203.5	72.1	843	4	US-09-361-631-1 Sequence 1, Appli
3	3151.5	70.9	843	4	US-09-361-631-2 Sequence 2, Appli
4	1107	24.9	1059	3	US-09-134-513-2 Sequence 2, Appli
5	1094	24.6	1078	1	US-08-485-588-7 Sequence 7, Appli
6	1094	24.6	1078	1	US-08-484-565-7 Sequence 7, Appli
7	1094	24.6	1078	2	US-08-480-751-7 Sequence 7, Appli
8	1094	24.6	1078	2	US-08-943-986-7 Sequence 7, Appli
9	1094	24.6	1078	3	US-08-353-784-7 Sequence 7, Appli
10	1094	24.6	1078	3	US-08-484-719B-7 Sequence 7, Appli
11	1094	24.6	1078	4	US-08-484-159-7 Sequence 7, Appli
12	1092.5	24.6	1027	4	US-09-162-021B-2 Sequence 2, Appli
13	1088.5	24.5	1079	1	US-08-485-588-8 Sequence 8, Appli
14	1088.5	24.5	1079	1	US-08-484-565-8 Sequence 8, Appli
15	1088.5	24.5	1079	2	US-08-480-751-8 Sequence 8, Appli
16	1088.5	24.5	1079	2	US-08-943-986-8 Sequence 8, Appli
17	1088.5	24.5	1079	3	US-08-353-784-8 Sequence 8, Appli
18	1088.5	24.5	1079	3	US-08-484-719B-8 Sequence 8, Appli
19	1088.5	24.5	1079	4	US-08-484-159-8 Sequence 8, Appli
20	1087.5	24.5	1085	1	US-08-485-588-5 Sequence 5, Appli
21	1087.5	24.5	1085	1	US-08-484-565-5 Sequence 5, Appli
22	1087.5	24.5	1085	2	US-08-480-751-5 Sequence 5, Appli
23	1087.5	24.5	1085	2	US-08-943-986-5 Sequence 5, Appli
24	1087.5	24.5	1085	3	US-08-353-784-5 Sequence 5, Appli
25	1087.5	24.5	1085	3	US-08-484-719B-5 Sequence 5, Appli
26	1087.5	24.5	1085	4	US-08-484-159-5 Sequence 5, Appli
27	1079	24.3	1088	1	US-08-485-588-6 Sequence 6, Appli

28	1079	24.3	1088	1	US-08-484-565-6	Sequence 6, Appli
29	1079	24.3	1088	2	US-08-480-751-6	Sequence 6, Appli
30	1079	24.3	1088	2	US-08-943-986-6	Sequence 6, Appli
31	1079	24.3	1088	3	US-08-353-784-6	Sequence 6, Appli
32	1079	24.3	1088	3	US-08-484-719B-6	Sequence 6, Appli
33	1079	24.3	1088	4	US-08-484-159-6	Sequence 6, Appli
34	1012.5	22.8	877	4	US-09-619-353-2	Sequence 2, Appli
35	995	22.4	1219	2	US-08-687-289A-6	Sequence 6, Appli
36	995	22.4	1219	4	US-09-435-887-6	Sequence 6, Appli
37	964	21.7	975	4	US-09-695-481-4	Sequence 4, Appli
38	917.5	20.7	863	4	US-09-619-353-14	Sequence 14, Appli
39	867.5	19.5	851	4	US-09-619-353-12	Sequence 12, Appli
40	856	19.3	854	4	US-09-619-353-10	Sequence 10, Appli
41	850	19.1	856	4	US-09-619-353-8	Sequence 8, Appli
42	849.5	19.1	835	4	US-09-619-353-7	Sequence 7, Appli
43	743	16.7	1058	2	US-08-687-289A-5	Sequence 5, Appli
44	743	16.7	1058	4	US-09-435-887-5	Sequence 5, Appli
45	724.5	16.3	915	1	US-08-453-862-2	Sequence 2, Appli

ALIGNMENTS

```
RESULT 1
US-09-361-631-7
; Sequence 7, Application US/09361631
; Patent No. 6383778
; GENERAL INFORMATION:
; APPLICANT: Zuker, Charles S.
; APPLICANT: Adler, Jon Elliot
; APPLICANT: Lindemeier, Juergen
; APPLICANT: The Regents of the University of California
; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor
; FILE REFERENCE: 023078-088720US
; CURRENT APPLICATION NUMBER: US/09/361,631
; EARLIER FILING DATE: 1999-07-27
; EARLIER APPLICATION NUMBER: US 60/095,464
; EARLIER FILING DATE: 1998-07-28
; EARLIER APPLICATION NUMBER: US 60/112,747
; EARLIER FILING DATE: 1998-12-17
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 669
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: human G-protein coupled receptor (GPCR) B4 amino
; OTHER INFORMATION: acid sequence
US-09-361-631-7
Query Match          79.1%; Score 3514; DB 4; Length 669;
Best Local Similarity 98.4%; Pred. No. 0;
Matches 666; Conservative 1; Mismatches 2; Indels 8; Gaps 2;
QY      162 ITTSAISSELDKRPALRTTPSADHVEAMQVMHFRNNWITIVSSDTGRDNGQ 221
DB      1 ITTSAISSELDKRPALRTTPSADHVEAMQVMHFRNNWITIVSSDTGRDNGQ 60
QY      222 LLGSEVARDRCIAFOETPLTOPNOMNTSEBOKLVITVKKLOOSTARVVVFPDITL 281
DB      61 LLGSEVARDRCIAFOETPLTOPNOMNTSEBOKLVITVKKLOOSTARVVVFPDITL 120
QY      282 YHFFNEVLKQNFQTAQVWIASSEMAIDPVNLHMLTELGLIGTIGTIOGPIPGSEFFREW 341
DB      121 YHFFNEVLKQNFQTAQVWIASSEMAIDPVNLHMLTELGLIGTIGTIOGPIPGSEFFREW 180
QY      342 GPQAGPPPLSTSGSYTCNQECNCLNATLSFNTILRSGERVVYSVSAVYAAVAHALHS 401
DB      181 GPQAGPPPLSTSGSYTCNQECNCLNATLSFNTILRSGERVVYSVSAVYAAVAHALHS 240
QY      402 LLGCKSKCTRRVYVPMQLLBEIKKNTLLDHOIFPDQGDVALHLBIVQMDRSGNP 461
```

```

Db      241  LLGCDKSTCTKRVVPMQLLEIEIMKVNFTLLDHQIFPDQGDVALHLEIVQMQRSONP 300
Qy      462  FQSVASVYPLQROLKNIODISHTNTNTIPMSMCKRCQSGOKKRPVGIHNCCEPCIDCL 521
Db      301  FQSVASVYPLQROLKNIK-TSLHTVNTNTIPMSMCKRCQSGOKKRPVGIHNCCEPCIDCL 359
Qy      522  PGTFLNTHTEDEYECQACPNNEWSYQSETSCEFRQVLFLMEHAPITIAVALLAALGFLSTL 581
Db      360  PGTFLNTHTE-----CENNEWSYQSETSCEFRQVLFLMEHAPITIAVALLAALGFLSTL 412
Qy      582  AILVIFMRHFOPTPIRSAGGPMCFMLTLLVAVVWVYVYVGPVSTCLCRQALPLICF 641
Db      413  AILVIFMRHFOPTPIRSAGGPMCFMLTLLVAVVWVYVYVGPVSTCLCRQALPLICF 472
Qy      642  TICISCLAVRSFOIVCAFKMSRPRAYSVMWRQGVPMNAFTVLKXIVVIGMLARP 701
Db      473  TICISCLAVRSFOIVCAFKMSRPRAYSVMWRQGVPMNAFTVLKXIVVIGMLARP 532
Qy      702  QSHRTDDBDKITIVSCNPNYRNSLLENTSLDLLLSVGFSPAYMGKELPTNYNEAKFI 761
Db      533  QSHRTDDBDKITIVSCNPNYRNSLLENTSLDLLLSVGFSPAYMGKELPTNYNEAKFI 592
Qy      762  TLSMTFYFTSSVSLCTFMSAYSGLVLTIVDLLVTLVNLALISLGYFGPKCYMLFYPERN 821
Db      593  TLSMTFYFTSSVSLCTFMSAYSGLVLTIVDLLVTLVNLALISLGYFGPKCYMLFYPERN 652
Qy      822  TPAYFNSMIOGYTMRD 838
Db      653  TPAYFNSMIOGYTMRD 669

```

## RESULT 2

```

US-09-361-631-1
; Sequence 1, Application US/09361631
; Patent No. 6383778
; GENERAL INFORMATION:
; APPLICANT: Zuker, Charles S.
; APPLICANT: Adler, Jon Elliot
; APPLICANT: Lindemeier, Juergen
; APPLICANT: The Regents of the University of California
; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor
; FILE REFERENCE: 02307E-088720US
; CURRENT APPLICATION NUMBER: US/09/361,631
; EARLIER FILING DATE: 1999-07-27
; EARLIER APPLICATION NUMBER: US 60/095,464
; EARLIER FILING DATE: 1998-07-28
; EARLIER APPLICATION NUMBER: US 60/112,747
; EARLIER FILING DATE: 1998-12-17
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 843
; TYPE: PRT
; ORGANISM: Rattus sp.
; FEATURES:
; OTHER INFORMATION: rat G-protein coupled receptor (GPCR) B4 amino
; OTHER INFORMATION: acid sequence
US-09-361-631-1

```

```

Query Match      72.1%; Score 3203.5; DB 4; Length 843;
Best Local Similarity 70.6%; Pred. No. 6,2e-296;
Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

```

```

Qy      1  MGPRAKTICSLFLLIWLAEPR--AENSDFYLPQGYLLGLFSJLHANKGIVHLNFIQVP 57
Db      1  MGPARATICLLSLHLVLPKPKLWENSDPFLAGDYLLGLFTLHANKYSISHSYLQVP 60
Qy      58  MCKEYEVVIVGYVNIQMARFAVEEINNDSSLLPGULGLEYELVDVCYISNNQVLYFLAH 117
Db      61  KCNEFTMKVLGYVNIQMARFAVEEINNDSSLLPGVLLGYEMVDVCYISNNIHFGVLYLAQ 120

```

```

Qy      118  EDNLPIQEDYSNIYISHRVAVIGPDNSESVMYANFLSLFLPQITVSAISDELKRVRF 177
Db      121  DDDLPLIKQYISQGMHPHVAVIGPDNSESALTITNSILSHLIPQITVSAISDLKRDKRHF 180
Qy      178  PALIRTPSADHVEANVQMLHFRKRWIIVLVSSDPTYGDNQGLCEARAR-RDICIAP 236
Db      181  PSMLRTPSATHTIEANVQMLHFRKRWIIVLVSSDDYGRENSILLSQRLTKTSIDICIAF 240
Qy      237  QETPLTQPNQNMNTESEORLVTIVDLQOSTAVVWVVFSDLTLYHFMFNEVLKQNTGA 296
Db      241  QEVLPRESSQWNRSEQRQNDNLTKRRTSARVWVVFSELSLVSFFHEVLKRNNTGF 300
Qy      297  VMASEMAIDPVLANLTTELGHCTFLGITIGVPIPGFSEFREMGQAGPPLSRTSQS 356
Db      301  VMASEMAIDPVLANLTTELGHCTFLGITIGVPIPGFSEFREMGQAGPPLSRTSQS 360
Qy      357  YTCNQECDNCLNATLSNTILRLSGEVRVYVSYSAYVAVAHALSHLSLGCDSKSTTKVY 416
Db      361  TTCNQDCCACLNATKTSNNILILSGEVRVYVSYSAYVAVAHALSHLSLGCNRRVCTKQKV 420
Qy      417  PMOLLEIMKVNFTLLDHQIFPDQGDVALHLEIVQMQRSONPQSVASVYPLQROLK 476
Db      421  PMOLLEIMKVNFTLLGNRLFDDQGDMPMLDILIQMDLSQNPQSVASVYPLQROLK 480
Qy      477  NIODISHTNTNTIPMSMCKRCQSGOKKRPVGIHNCCEPCIDCLPGTFLNTHTEDEYECQ 536
Db      481  YINNVSVYTPNNTVPIVSMCKSCQPGQMKSVGLHPCFCFCIDCMPGTYLNRSDDEFNCL 540
Qy      537  ACPNNEWSYQSETSCEFRQVLFLMEHAPITIAVALLAALGFLSTLAILVIFMRHFOPTPI 596
Db      541  SCPSGMSWSYKNDITCFORREPTFLEMEHAPITIAVALLAALGFLSTLAILVIFMRHFOPTPI 600
Qy      597  RSAGGPMCFMLTLLVAVVWVYVYVGPVSTCLCRQALPLICFTICISCLAVRSFOIV 656
Db      601  RSAGGPMCFMLVPLDLAFGMWVYVGPVSTCLCRQALPLICFTICISCLAVRSFOIV 660
Qy      657  CAFPMASRPRAYSVMWRQGVPMNAFTVLKXIVVIGMLARPOSHR--RTDPPDKI 714
Db      661  CVFPMARRLPASVPMWRHYGPFYFAITAIVALLVGMMLA-TTINPIGRDPPDKI 719
Qy      715  TIVSCNPNYRNSLLENTSLDLLLSVGFSPAYMGKELPTNYNEAKFTLSMTFYFTSSVS 774
Db      720  MITSCHENYRNGLLFNNTSMOULLSVLGFSPAYMGKELPTNYNEAKFTLSMTFYFTSSVS 779
Qy      775  LCTFMSAYSGLVLTIVDLLVTLVNLALISLGYFGPKCYMLFYPERTPAYFNSMIOGYT 834
Db      780  LCTFMSAYHDGVLTIMDLVTLVNLALISLGYFGPKCYMLFYPERTPAYFNSMIOGYT 839
Qy      835  MRR 837
Db      840  MRK 842

```

## RESULT 3

```

US-09-361-631-2
; Sequence 2, Application US/09361631
; Patent No. 6383778
; GENERAL INFORMATION:
; APPLICANT: Zuker, Charles S.
; APPLICANT: Adler, Jon Elliot
; APPLICANT: Lindemeier, Juergen
; APPLICANT: The Regents of the University of California
; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor
; FILE REFERENCE: 02307E-088720US
; CURRENT APPLICATION NUMBER: US/09/361,631
; EARLIER FILING DATE: 1999-07-27
; EARLIER APPLICATION NUMBER: US 60/095,464
; EARLIER FILING DATE: 1998-07-28
; EARLIER APPLICATION NUMBER: US 60/112,747
; EARLIER FILING DATE: 1998-12-17
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0

```

```
/ SEQ ID NO 2
/ LENGTH: 843
/ TYPE: prt
/ ORGANISM: Mus sp.
/ FEATURE:
/ OTHER INFORMATION: mouse G-protein coupled receptor (GPCR) B4 amino
/ OTHER INFORMATION: acid sequence
US-09-361-631-2

Query Match      70.9%; Score 3151.5; DB 4; Length 843;
Best Local Similarity 68.9%; Pred. No. 5.5e-291;
Matches 581; Conservative 113; Mismatches 142; Indels 7; Gaps 4;

QY 1 MGPRAKTCISLPELLVLAEP---AENSDFYLPQGYLLGSLSHANMKGIYHLNFIQVP 57
DB 1 MGPQATTLHLPLHLALPKPVMVLVGNSDPHLAGDILLGLPTLHANVSVSHLSLYQP 60
QY 58 MCKEYEVKIGYNLMQAMRFAVEEINNDSSLPGVLLGEYIDVCYISNNQPVLYFLAH 117
DB 61 KCEYEMKVLGYNLQAMRFAVEEINNCSSLLPGVLLGEMVDVCLSNIQPGLYFLSQ 120
QY 118 EDNLPIQEDYSNYSRVAIVIGPDNSVMTVANFLSLPQITYSASIDELDKYRF 177
DB 121 IDDFPLIKDYQYRQVAVAVIGPDNSBSAITVSNILSYFLVPQYTSAITDKLDKRF 180
QY 178 PALLETTSADHHEAMVQMLHFRKMTIYVSSDPTGRDNGQLLGERVAR-DICIAF 236
DB 181 PAMLTVPSPATHHIAAMQVMHFMNMIVLVSDDDYGRNSHLLSQRLTNTGDI CIAF 240
QY 237 QETLPTLQPNQMTSEERQRLVTIYDKLOOSTARVVVSPDLTYHFENEYLROQFTGA 296
DB 241 QEVLPVRENOAVRREBOQDNLIDKLRISARVVIVISPELSLHNFREYLRNMTFCF 300
QY 297 WIASESMAIDVNLNLTELGLGTLGITIQSVPIPGSEFERMGQAPPLSRTSQS 356
DB 301 WIASESMAIDVNLNLTELRLTGTFGLVGIORVSIIPGSGRVRHDKRGYMPMETSIR 360
QY 357 YTCNQCNCNCLNATLSFTLILSGERVYYSVSAVYVAHALHSLGDKSTCTKRVY 416
DB 361 TTCNODCDACNMITSFNNVLMLSGRVYVSAYAAVAHLRLHLCNOVRCQIY 420
QY 417 PMQLLEELIKVNFLLDHOIFPDPOGVALHLEIVOMQDRSQNPQSVASYYPIOROLK 476
DB 421 PMQLLEELIKVNFLLDHOIFPDPOGDMMLDITIQMOKGLSQNPQSVASISPEIRLT 480
QY 477 NIQDISMHTVNTIIPMSCKSKQSGQKKPVGIVHVCCEICIDCLPGTEFLNHTDEYECQ 536
DB 481 YISNVSMTYTNNTVPIISMCKSKSQGQMKKPIGLHPCFECVDCPPDTYLNRSVDENCL 540
QY 537 ACPNNEMSYQSTSCFKQQLVLEHHEATIAVALLALGELSTALIVLEFRHQTPIY 596
DB 541 SCPGSMWSYKNNIACFKRLAFLHWEHEVTIVTTLAALGFISTALILIFRKHQTPIY 600
QY 597 RSAGSPMCFMLTLLVAVMYVVPYVGPVKVSTCLCROALPFLCFICISCTAVSPQV 656
DB 601 RSAGSPMCFMLVPLIAFGMPVYVGPPTVSCCRQAFFTVCFSCVCLCTTVSPQIV 660
QY 657 CAFKMASRPPRAYSYWVRQGPYVMAFITVLMXIVYIGMLARQDSHP--RTDDEDPKI 714
DB 661 CVFKMARRLPSAYGEMRYHGFYVFAFITAVKVALVAGNMILA--TTINFIGTDDDDPI 719
QY 715 TIVSCNPNYRNLRTSISDLLSYVGSFAYMGKELPTNYNEAKFITLSMFFYTSSYS 774
DB 720 IILSCHPNYRNLRTSISDLLSYVGSFAVYVGEKELPTNYNEAKFITLSMFFSFTSSIS 779
QY 775 LCTFMSAVSGVLVTIVDLLVTYVNLALASLGFGPKCYMILFYPERNTPAYNSNIQGYT 834
DB 780 LCTFMSAVSGVLVTIVDLLVTYVNLALASLGFGPKCYMILFYPERNTPAYNSNIQGYT 839
QY 835 MRR 837
DB 840 MRK 842
```

```
RESULT 4
US-09-134-513-2
/ Sequence 2, Application US/09134513
/ Patent No. 6210964
/ GENERAL INFORMATION:
/ APPLICANT: Brown, Edward M.
/ APPLICANT: Diaz, Ruben
/ APPLICANT: Bai, Wei
/ TITLE OF INVENTION: The Avian Extracellular Calcium-Sensing
/ TITLE OF INVENTION: Receptor
/ NUMBER OF SEQUENCES: 2
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Vinson & Elkins L.L.P.
/ STREET: 1455 Pennsylvania Avenue, N.W.
/ CITY: Washington
/ STATE: D.C.
/ COUNTRY: U.S.
/ ZIP: 20004-1008
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/134, 513
/ FILING DATE:
/ CLASSIFICATION:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Sanzo, Michael A.
/ REGISTRATION NUMBER: 36,912
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (202) 639-6604
/ TELEFAX: (202) 639-6585
/ INFORMATION FOR SEQ ID NO: 2:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 1059 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: not relevant
/ TOPOLOGY: not relevant
/ MOLECULE TYPE: protein
/ HYPOTHETICAL: NO
US-09-134-513-2

Query Match      24.9%; Score 1107; DB 3; Length 1059;
Best Local Similarity 31.9%; Pred. No. 4.7e-96;
Matches 284; Conservative 148; Mismatches 354; Indels 104; Gaps 24;

QY 9 CSLFELL--WYLAEPENSDFYLPQGYLLGSLSHANMKGIYHLNFIQVPMCKEYEVK 66
DB 6 CCLILLLFTWNTAAAGPQQAQKKGDITLGLFPIHF--GVAARD--QDLKSRDESEVC 60
QY 67 IGYNL-----NQAMFAVEEINNDSSLPGVLLGEYIDVC-YISNNQPVLYFLA-HED 119
DB 61 IRYNFRGRFLQAMFAVEEINNSPLLPMNTLGRIPDTCTVSKALEATLSFYAQNKI 120
QY 120 NLPIQED--DYSNYSRVAIVIGPDNSVMTVANFLSLPQITYSASIDELDKYRF 177
DB 121 DSNLNDERCSSEHPTIATAVVGAGSGVSTAVANLLGLFYIPOVSYASSRSLSNQGF 180
QY 178 PALLETTSADHHEAMVQMLHFRKMTIYVSSDPTGRDNGQLLGERVARIDICIAFQ 237
DB 181 KSFLRTTINDEHQATAMADIIEYFRMNVGTIADDDYGRGIEKFRREAESEBDICIDS 240
QY 238 ETLPPLQPNQMTSEERQRLVTIYDKLOOSTARVVVSPDLTYHFENEYLROQFTGAV 297
DB 241 ELI-----SQYSDEEELQVVVEI---QNSTARVIVVSSGPDLEPLIKELVRRNITKI 292
QY 298 WIASESMAIDVNLNLTELGLGTLGITIQSVPIPGSEFERMGQAPPLSRTSQS 357
DB 293 WIASESMASSSLIAMPEFRVIGSTIGFALAAQGIQGRFELQ---KVHPKKSANNGPAK 349
```

358 TCNOECNCL-----NATLSFN----- 374  
350 EFWETFCYLPSESKNSPASASFKAHEBGLGAGNGTAARPPPTGENTISVETPYMD 409  
375 -TIRLSGERVYVSAYAVAAHLSLGC-----DKSTCKRVYVPMOLLEBIW 425  
410 FTHLRIS-----YNYVLAVYSIAHALODIYCTTPGKGLFTNGSCADIKKVEAMQVKKLRL 464  
426 KVNFTL-IDHOLFPPQGDVALHLEIVOMQDRSQNP--FQSVASYPL--OROLKNI 478  
465 HLNFTSNNGEVDVDFEGBDLVGNYSIIMWHLSPEDGSVVFEBGVHNYAKKGERLFTNE 524  
479 ODISHVNTNTIPMSCKRCSGOKKKPV-GIHVCEFCIDCLPGTFLNTHTEDEYEQCA 537  
525 NKILMSGSKVFPENCSDRDLPGRKGIIEGEPCCFECVDCPGEVSDET-DASADK 583  
538 CPNNEMSYOSETSCPKQLVPLEMHEAPTIYAVALLAAGLSTALILVIFMRHFTPIVR 597  
584 CPEDWYSENHTSCIPKQIEFLSMTEPFGIALTLFAVLGIFLTSFVLGVTKFRTPYIK 643  
598 SAGEMCLMTLLLVAMVYVYVGPVKVSTCLOALFPLCTITCISCIASVQIVC 657  
644 ATNRELSTLLFSLCCFSSSLFFIGEPQNMTCRLRQAFGISFVLCTISCLVKTNRVLL 703  
658 AFKMASRPRA-VSYVWRYGPPYVMAFITYLKNVIYVIGMLARPOSHPTDPPDKITI 716  
704 VFE-AKPTSLHRKMGMLNQLFLVPLCTFVQIYICWLYTAPSSYRNHELEDEIIF 761  
717 VSCNPVNSLLPNTSLDLLSVGSPFAYMKGELPTVYNEAKPTTSLMTEFTSSVSLC 776  
762 ITCHEGSLMALGFLGTYCTLLAICFPFAFKSRKLPENFNAKPTTFMILFFIWMIS-- 819  
QY 777 TFMAYSGVLTIVDLTYVNLALISG----YRGPCKWILFPBENT 822  
DB 820 -FIPAYASTYKFPVS-AVEVIAIILASFGLLACIFENKVYIILFEPNSHT 867

## RESULT 5

US-08-485-588-7  
Sequence 7, Application US/08485588  
Patent No. 5688938

## GENERAL INFORMATION:

APPLICANT: Edward M. Brown  
APPLICANT: Steven C. Hebert  
APPLICANT: Forrest H. Fuller  
APPLICANT: James E. Garrett, Jr.  
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: First Interstate World Center  
STREET: Suite 4700  
STREET: 633 West Fifth Street  
CITY: Los Angeles  
STATE: California  
COUNTRY: USA

ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PASTSEO  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,588  
FILING DATE: 7 June, 1995

CLASSIFICATION: 435  
PRIOR APPLICATION DATA: including application  
PRIOR APPLICATION DATA: described below: 9  
APPLICATION NUMBER: 08/353,784  
FILING DATE: 9 December, 1994

APPLICATION NUMBER: PCT/US/94/12117  
FILING DATE: 21 October, 1994  
APPLICATION NUMBER: U.S. 08/292,827  
FILING DATE: 23 August, 1994  
APPLICATION NUMBER: U.S. 08/141,248  
FILING DATE: 22 October, 1993  
APPLICATION NUMBER: U.S. 08/009,389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017,127  
FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 21 August, 1992  
APPLICATION NUMBER: U.S. 07/834,044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749,451  
FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Hebert, Sheldon O.  
REGISTRATION NUMBER: 38,179  
REFERENCE/DOCKET NUMBER: 213/005  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1078 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-485-588-7

Query Match 24.6%; Score 1094; DB 1; Length 1078;

Best Local Similarity 31.5%; Pred. No. 8.4e-95;

Matches 279; Conservative 160; Mismatches 342; Indels 106; Gaps 26;

16 WVLAEPAENSDPYLP-----GDYLLGGLPSLHANKGIVHNLQVNPCKEYEVYIG 68  
DB 8 WVLALTWHTSAYGPDQRAQKGGIILGGLFPIHF--GVAAND--QDLKSRPESVCEIR 62  
QY 69 YNL-----MQMRPAVEIINNDSLLPGLLGEIVDVC-YISNNQPVLYFLA-HEDNL 121  
DB 63 YNFRGFRMLQMTFAIEINSSPALPLNLTYGRIPTCTVTSVLEATLSFVAQNTIDS 122  
QY 122 LPIDG--DYSNYISRVAVAVIGPDNSSEVMTVNFSLFLPOTYSAISDELRAKVFPA 179  
DB 123 LNLDFCNCSEBHTSTTAIVAGATSGVSTAVANLLGLFYIPQVSASSSLSKSNQPKS 182  
QY 180 LRLTPSADHNVEMAVQMLHFRMNWIIIVSSDTYGRDNGQLGERVARRDICIAPQET 239  
DB 183 FLRTIPDEHQATAMADIIIEYFRMNWGTIAADDYGRPGIEKREBAERDIDIPSEL 242  
QY 240 LPTIQPNQNTSEERQGLYITVLDQOSTARVYVESPDLTVHFFNEVLKONTGAVMI 299  
DB 243 I-----SQYSDDEEIIQHVEVI---QNSTAKVIVFSSGPDLEPLIKEIVARNITGKWL 294  
QY 300 ASESMALPYLHNLTEGLHGTFLGITIQSVIPGFSF-----REMGPO 344  
DB 295 ASEMASSSLIAMEQYHVHVGITIGFALKAGQIDGFEFLKAKHPRKSVNNGFAKEWEE 354  
QY 345 A-----GPPRLTSQSYTCNQECNCLNATLSFNITRLSGE----- 382  
DB 355 TFNCHLQGAAGPLFVDTPLRGH--EESGDRFSSSTAFRPL--CTGDENISSVETPYID 410  
QY 383 ----RVYYSYSAVYAVAAHLSLGC-----DKSTCKRVYVPMOLLEBIWKNFT 430  
DB 411 YTHLRISYNYVLAVYSIAHALODIYCTLPGRGLFTNGSCADIKKVEAMQVKKLRLHNF 470  
QY 431 -LIDHOLFPPQGDVALHLEIVOMQDRSQNP--FQSVASYPL--OROLKNIODIS 482  
DB 471 NNMGEQVTFEBCGDLVGNYSIIMWHLSPEDGSIVFKV-GYVNVYAKKGERLFPNEKIL 529  
QY 483 WHTVNTNTIPMSCKRCSGOKKKPV-GIHVCEFCIDCLPGTFLNTHTEDEYEQACPPNN 541





```

GENERAL INFORMATION:
APPLICANT: Edward M. Brown
APPLICANT: Steven C. Hebert
APPLICANT: James B. Garrett, Jr.
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE
TITLE OF INVENTION: MOLECULES
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESS: Lyon & Lyon
STREET: First Interstate World Center
STREET: Suite 4700
STREET: 633 West Fifth Street
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90071

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PASTSEQ

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/943,986
FILING DATE: 03-OCT-1997
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/484,565
FILING DATE: 7-June-1995
APPLICATION NUMBER: 08/353,784
FILING DATE: 9 December, 1994
APPLICATION NUMBER: PCT/US/94/12117
FILING DATE: 21 October, 1994
APPLICATION NUMBER: U.S. 08/292,827
FILING DATE: 23 August, 1994
APPLICATION NUMBER: U.S. 08/141,248
FILING DATE: 22 October, 1993
APPLICATION NUMBER: U.S. 08/009,389
FILING DATE: 23 February, 1993
APPLICATION NUMBER: U.S. 08/017,127
FILING DATE: 12 February, 1993
APPLICATION NUMBER: U.S. 07/934,161
FILING DATE: 21 August, 1992
APPLICATION NUMBER: U.S. 07/834,044
FILING DATE: 11 February, 1992
APPLICATION NUMBER: U.S. 07/749,451
FILING DATE: 23 August, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Heber, Sheldon O.
REGISTRATION NUMBER: 38,179
REFERENCE/DOCKET NUMBER: 213/006
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 1078 amino acids
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-943-986-7

```

```

Query Match 24.6%; Score 1094; DB 2; Length 1078;
Beet Local Similarity 31.5%; Pred. No. 8.4e-95;
Matches 279; Conservative 160; Mismatches 342; Indels 106; Gaps 26;

```

```

122 LPIDQ--DYSNYSRVAVIGPDNSESVMTVANFLSLFLLPQITYSATISDELDRKVRPPA 179
123 LNLDFCNCSSEHIPPETIAVVGATGCVSTAVANLGLYIIPVSTASSRLSNKQFKS 182
124 LRTTPSADHVEAMVWQMLFRRNMIIVLVSDTYGRDNGQLGERRVARDICIAFOET 239
125 FLRTIPNDHQATNAADIIEYFRNMWVGTIAADDYGRGJIEKPEEABEERDICI DFSEL 242
240 LPTLPQNMNTSEERQRLVTVDKLQOSTARVVVFSDDLTYAFNEVLRONFGAIVTI 299
243 I-----SQSDEEIEQHVEVI---QNSTAKYIVVSSGPDLEPLIKEIVRNITGKIWL 294
300 ASESMAIDPVLANLTELGLTFLGITIQSPFIPGSEF-----REMBQ 344
305 ASEMASSSLIAMPQYFHVVGATIGFALKAQIIGFREFLEKKVAPRKSVHNGFAKPEWE 354
345 A-----GPPLSRTSOSYTCNOECDNCLNATLSFNTILRLSGE----- 382
355 TFNCHLQGAGPLPVDFTFLAGH--EESGDRFNSNSTAFRL--CTGDENISSVETPYID 410
383 ---RVVYSVSAVVAVALHSLIGC-----DKSTCRVVPWQLBEIKVKNFT 430
411 YTHLRISYVAVYIAHALQDIYTCIPGRGLFTNGSCADIKKVEAMQVILKHLRLNFT 470
431 -LIDHQIFPDQGVVALHLEIVQWQMDRSQNP--FQSAVSYPL-----QRLKXIODIS 482
471 NMGEQVTFDECGDLVGVYSIINMHLSPEDSIVFKEY--GYNVYAKKGERLFTNEKIL 529
483 WHTVNTIPMSMCSKRCOSGOKKRPV-GIHVCEFCIDCLPQTFLNTEDEYECACPNN 541
530 WSGFRSEVPFNSGRDCLAGTRKGIIESEPCCEFCVCPGGEYDEI--DASACKCDD 588
542 EMSYQSETSCFRQLVLEHHEAPLIAVALLAIGFLSTALIVFWHPQTPYRSAGG 601
589 FWSNENHTSCIAKEIEFLSWTEPGIALTLPAVIGIFLTAFLVGLVIFKRTPIVATNR 648
602 PMCFMLTLLLVANVNVVYGPVRSYCLQRLQALPFCITICSCIVRSFOYICAR-- 659
649 ELSTLLFLSLCCPSSSLFFIGEPQDWTCLRLQAPGSLFVLCISCLIVKTNRLVLEVA 708
660 KMASRPPAYSVWRYOGPVYMAFIVLKNVIVIGMLAPQSHPTDPPDKITIVSC 719
709 KIPLSFHKK--WGMNLQFLVFLCTFMQIVICWIMYTRAPSSRYQOELEDEIIFITC 765
766 HEGSIMALGFLIGTCLLAICFPFAFKSRKLPEFNFAKFTFSMLIFIVMIS--FI 822
823 SAYSGVLTIVDLYVTUNLAISLG---YFGPKCYILFYPERNT 822
823 PAYASTYGFVS-AVEVIAIILAAFGLLACIFPKIYIILFKPSRNT 868

```

```

RESULT 9
US-08-353-784-7
Sequence 7, Application US/08353784
Patent No. 6011068
GENERAL INFORMATION:
APPLICANT: Edward F. Nemeth, Edward M.
APPLICANT: Brown, Steven C. Hebert,
APPLICANT: Bradford C. Van Wagenen, Manuel
APPLICANT: F. Balandrin, Forrest H. Fuller,
APPLICANT: Eric G. Delmar, and Scott T. Moe
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE
TITLE OF INVENTION: MOLECULES
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESS: Lyon & Lyon
STREET: First Interstate World Center
STREET: Suite 4700
STREET: 633 West Fifth Street
CITY: Los Angeles

```

```

STATE: California
COUNTRY: USA
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: FASTSEQ
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/353,784
FILING DATE: 9 December, 1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below: 8
APPLICATION NUMBER: PCT/US/94/12117
FILING DATE: 21 October, 1994
APPLICATION NUMBER: U.S. 08/292,827
FILING DATE: 23 August, 1994
APPLICATION NUMBER: U.S. 08/141,248
FILING DATE: 22 October, 1993
APPLICATION NUMBER: U.S. 08/009,389
FILING DATE: 23 February, 1993
APPLICATION NUMBER: U.S. 08/017,127
FILING DATE: 12 February, 1993
APPLICATION NUMBER: U.S. 07/934,161
FILING DATE: 21 August, 1992
APPLICATION NUMBER: U.S. 07/834,044
FILING DATE: 11 February, 1992
APPLICATION NUMBER: U.S. 07/749,451
FILING DATE: 23 August, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Heber, Sheldon O.
REGISTRATION NUMBER: 38,179
REFERENCE/DOCKET NUMBER: 209/069
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 1078 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-353-784-7

Query Match 24.6%; Score 1094; DB 3; Length 1078;
Best Local Similarity 31.5%; Pred. No. 8.4e-95;
Matches 279; Conservative 160; Mismatches 342; Indels 106; Gaps 26;

QY 16 WVLAEPRNSDFTLP-----GVYLLGGLFSLHNMKGIVHNLFLQVPMCKEYKAVIG 68
DB 8 WVLALTWHTSAVYDPDQAKKQDILLGLLPPIHF--GVAAKO--DULSKRPSVECTIR 62
QY 69 YNL-----MQAMRAVEERINNDSLLPGLLYGEIVDVC-YISNNVQPVLYFLA-HEENL 121
DB 63 YNFRGFRLLQGMIFALIEINSSPALPLRLTLGYRIPTDCTNVSKALELTSFVQNNKIDS 122
QY 122 LPIDG--DYSNYSIRVAVVIGPDNSESMTYANFLSLFLPQITYSAISDELKRVKPPA 179
DB 123 LNLDEFNCSEHISTIAVGVATSGVTAVANLLGLFYIQVSVASSSRLSNKQFKS 182
QY 180 LLRTTPSDHHVAVVQVLMFRNMWIIIVLVSPTYGRDNQQLGGERARBDICIAFOET 239
DB 183 FLRTIPNDEHATIMADIIETFRNMWGTIAADDYGRPGIEKREAEERDICIIDSEL 242
QY 240 LPTLPQNMNTSEERQRLVITVDLQOSTARVVVFSFDLTLYHFFNEVLKQNTGAVMI 299
DB 243 I-----SQYSDDEELQHVVEI---QNSTAKVIVVSSGPPLEPLKEIVARNITGKIML 294
QY 300 ASESWALDVPVLANITELGHLGTFTGITTQSVPIGFSEF-----REMGPO 344

```

```

DB 295 ASEMAMSSLLIAMPQYFHVVGTTIGFALXAGQIPGFREPLKXVPRKSVHNGFAKEFWEE 354
QY 345 A-----GPPLSRTSQSYTCNQECNCAATLSFTNLRLSGE----- 382
DB 355 TFNCHLOEGAKGPLPVDTPILRGH--ESGDRFNSNSAFRPL--CTODENISSVETPYID 410
QY 383 ----RVVYSVYSAVYAVAHLSLLGC-----DKSTCKRVVYPMQLEIWKVNT 430
DB 411 YTHLRISYNYVLYAVSIHALODIYTCLPGRGLFTNGSCADIKKVEAMQYLKHLRHLNFT 470
QY 431 -LDHQIFPDPOGDVALHLEIVQMQRSONP--FQSVASYTLP-----ORLKNIDIS 482
DB 471 NNMGEQVTFDECDLVGNYSIIMWHLSPEDGSIVFKEV-gyvvvYAKKGERLNEEKIL 529
QY 483 WHYNNNTIPMSWCSKRCQSGOKKPV-GHVCCEPICDCLPGLNTEDEYEQACPN 541
DB 530 WSGFSREVFPFNSCRDCLATRGKIIIEGPTCCPECEYCEPDGEYSDET-DASCKNCPDD 588
QY 542 EMSYQSETSCFKQVLEWHEAPTIYVALAALGFLSTLAILVIFWRHPQRTPIVSAGG 601
DB 589 FMSNENHTSCIAKIEFLSWTEPFGIALTLFAVIGFLTAFLVGVFIKFRNTPIVKATNR 648
QY 602 PMCFMLTLLVAVMVVYVGPVKYSTCLCRQALPPLCTTICICIAVRSFOIVCAF-- 659
DB 649 ELAYLLFLSLCCFSSLFPIGEPDWTCLRPARGISVLCISCLVXTNVLAVFEA 708
QY 660 KMASRFPFRAYSVMVYVQGPVVSMAFITVLCMVIVVIGMLARPOSHPTDPPDKRTIVSC 719
DB 709 KIPTSFHRK---WGNLQPLVFLCTFMQIVICVIMLYAPRPSYRNQGLDEIIFITC 765
QY 720 NPNYRNSLFTNSLDLLSVGFSFAYMGKELPTNNEAKFTLSMTFYTSSVSLCTFM 779
DB 766 HEGSLMALGFLIGYTCILAAICFFFAFKSRKLDENENEAFTFPMILFIIVMIS--FI 822
QY 780 SAYSGVLVTVVDLVTYVNLALISLG----YFEPKCMILFYEBRT 822
DB 823 PAVASYGKFVS-AVEVIALTLAASFGULACIFPNKXIYIILFKPSRNT 868

RESULT 10
US-08-484-719B-7
Sequence 7, Application US/08484719B
Patent No. 6031003
GENERAL INFORMATION:
APPLICANT: Edward F. Nemeth, Edward M.
APPLICANT: Brown, Steven C. Hebert,
APPLICANT: Bradford C. Van Wageningen,
APPLICANT: Manuel F. Balandin,
APPLICANT: Forrest H. Fuller, Eric G.
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE
TITLE OF INVENTION: MOLECULES
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: First Interstate World Center
STREET: Suite 4700
STREET: 633 West Fifth Street
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: MS Word
SOFTWARE: FASTSEQ for Windows Version 3.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,719B
FILING DATE: 7 June, 1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/353,784

```

FILING DATE: 9 December, 1994  
APPLICATION NUMBER: PCT/US/94/12117  
FILING DATE: 21 October, 1994  
APPLICATION NUMBER: U.S. 08/292,827  
FILING DATE: 23 August, 1994  
APPLICATION NUMBER: U.S. 08/141,248  
FILING DATE: 22 October, 1993  
APPLICATION NUMBER: U.S. 08/009,389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017,127  
FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 21 August, 1992  
APPLICATION NUMBER: U.S. 07/834,044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749,451  
FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Douglas C. Murdock  
REGISTRATION NUMBER: 37,549  
REFERENCE/DOCKET NUMBER: 213/007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1078 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-484-719B-7

Query Match 24.6%; Score 1094; DB 3; Length 1078;  
Best Local Similarity 31.5%; Pred. No. 8,4e-95;  
Matches 279; Conservative 160; Mismatches 342; Indels 106; Gaps 26;

16 WYLAEPANSDPYLP-----GDVLLGLFELHNMGIYVNLQVMEKYEYKYG 68  
8 WYLAALWHTSAVYGDQAKKGDITLLGLFPIHF--GVAKD--QDLKSPRESVECR 62  
69 YNL-----MOAMRPAVEEINNDSSLLPGVLGEYIVDYC-YISNNVQPLYELA-HEDEL 121  
63 YNFRGFRMLQAMITFAIEEINSSPALLPNTLTGIRLPDTCTNYSKALEATLSVAQNKIDS 122  
122 LPIDQ-DYSNYISRVAVTGPDSSESVTVANFLSLFLLPQITYSAISDELDRVRPFA 179  
123 LNLDFCNCSEHIFSTIANVGATGVSFAVANLGLFYITPQVSASSRLLSNKQFQS 182  
180 LIRTPSADHVEANVQMLHRRNWIIVLSSDTYGRDNGQLGERVARDICIAFOET 239  
183 FLRTIPNDEHQATAADIEYFRMVMVGITADDDYGRGILEKFEAEERDIDICDFSEL 242  
240 LPTLPQNMNTSEERQRLVTIVDKLQOSTARVVVSPDLTYHFNEVLRNFTGAWI 299  
243 I-----SQYSDDEEIOHVEVI--QNSTAKYIVVSSGPDLEPLIKETVRNITGKML 294  
300 ASESWAIDPVHLNLTGLTGLTITTSQSVIPGFSEF-----REMGPO 344  
295 ASEBAWASSLLAMPQYFHVVGCTIGPALKAGIIPGRFRLKVKVHRKSVHNGFAKEFME 354  
345 A-----GPPLSRTSQSYTCNOECDNCLNATLSFNTLRISGE----- 382  
355 TFNCHLOGAKGRLVDVDFLRGH--EESGDRFSNSSTAFRPL--CTGDEMISVETPYID 410  
363 -----RVVSVYSAVVAVALHSLIGC-----DKSCTRVVYVPMOLLEIKANVT 430  
411 YTHLISINVIYAVVISIALHODIYTCPLRGFLTNNGSCADIKKVAWVHLHLHLNFT 470  
431 -LLDHQIFDDPOGDVALHLEIVQWQMDRSQNP--FQSVASYPL-----QROLKNIODIS 482  
471 NNMGGQVTFDEBCGDLVGNYSIINMHLSPEDGSIVRKEV-GYNNVYAKKGERLFINBEKTL 529

483 WHTVNTIPMSCKSRKCGOKKKV--GIHVCCFECIDCLPOTPLNHTDEYECQACPN 541  
530 MSGFRVFPFNCSDRCLAGIRKGIIBEPLOCCEFCVBCPGEYDEI--DASACKCDD 588  
542 EMSYQSETSCFRQQLVLEHEDAPTIYAVALLAAGFSTLAILVIFMWHFQTPYRSAG 601  
589 FWSNENHSCIAKEIEFLSWTEPFQIALTLFAVIGIFLTAAGVIFIRNTPYKATNR 648  
602 FMCFMLTLVLVAVNVVYVGPVSTCLROALFPLCFITICSCIVRSQIYCAR-- 659  
649 ELSTYLLFSLCCRSSLFTIGEPODWCTRLRQAPFGISFVLCISCLIVKTRVLVFEA 708  
660 KMASRFPAYSVWVRVYQGYVSMAFITVKNVIVIGKLARPOSHPRTDPPDKITVISC 719  
709 KIPSPFHRK--WGLNIQPLVFLCTMOVIVCIWLYTPAPSSYRNQDELEDEIIFITC 765  
720 NPNYRNSLLENTSLDLLSVGFSPAYGKELPTNNEAKFITLSMTFYFTSSVSLCTFM 779  
766 HEGSLMALGFLIGVYCLLAICFPFAFKSRKLPENFNEAKFITFSLFIYIWS--FI 822  
780 SAYSGVLTIVDLYTVNLAISIG---YFGPKYMLFYPPENT 822  
823 PAYASTYGRFVS-AVEVTAIIAASFGILACIFFNKIYIILFKPSHNT 868

RESULT 11  
US-08-484-159-7  
Sequence 7, Application US/08484159  
Patent No. 6313146  
GENERAL INFORMATION:  
APPLICANT: Bradford C. Van Magenen  
APPLICANT: Manuel F. Balandrin  
APPLICANT: Eric G. Del Mar  
APPLICANT: Edward F. Nemeth  
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
TITLE OF INVENTION: MOLECULES  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: First Interstate World Center  
STREET: Suite 4700  
STREET: 633 West Fifth Street  
CITY: Los Angeles  
STATE: California  
COUNTRY: USA  
ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: FASTSEQ  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/484,159  
FILING DATE: 7 June, 1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
PRIOR APPLICATION DATA: including application  
PRIOR APPLICATION DATA: described below: 9  
APPLICATION NUMBER: 08/353,784  
FILING DATE: 9 December, 1994  
APPLICATION NUMBER: PCT/US/94/12117  
FILING DATE: 21 October, 1994  
APPLICATION NUMBER: U.S. 08/292,827  
FILING DATE: 23 August, 1994  
APPLICATION NUMBER: U.S. 08/141,248  
FILING DATE: 22 October, 1993  
APPLICATION NUMBER: U.S. 08/009,389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017,127  
FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 21 August, 1992

APPLICATION NUMBER: U.S. 07/834,044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749,451  
FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Heber, Sheldon O.  
REGISTRATION NUMBER: 38,179  
REFERENCE/DOCKET NUMBER: 214/101  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1078 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-484-159-7

Query Match 24.6%; Score 1094; DB 4; Length 1078;  
Best Local Similarity 31.5%; Pred. No. 8,4e-95;

Matches 279; Conservative 160; Mismatches 342; Indels 106; Gaps 26;

16 WLAEPANSDPYLP-----GDYLLGGLFSLHANMGIYALNPLQYPMCKEYEVKIG 68  
8 WVLALMTHTSAYGDDQAKKGDILLGLFPIHF--GVAKD--QDLKRPSEVEIR 62  
69 YNL-----MAMRFAVEIINDSSLLPGVLLGYEIVDYC-YISNNQVLYFLA-HEENL 121  
63 YNFGFWLQAMIFAIIEINSPALLPVLITGRIFDTCNTVSKALEATLSFVQNKIDS 122  
122 LPICE--DYSNYISRVVAVIGPDNSESVMTVANFLSLFLPQITSAISDELKVRPFA 179  
123 LNLDFCNCSEHIEPTIAVGATGSGVSTAVANLGLFYITPOVSASSRLISNCKPKS 182  
180 LRLTPSADHVEAMVQMLHFRNMWIIVLVSSDTYGRDNGQLGERVARRDICTAFOET 239  
183 FLRTIPNEHQATAMADIIYFRMNVGTIAADDYGRGIEKFEAEAEEDIDICDFSEL 242  
240 LPTLOPNQMTSEERQLVTVDKLQOSTARVYVFSDDLTYAFENEVLKONFTGAVIT 299  
243 I-----SQYSDDEEIOHVEVY--QNSTAKIVVSSGPDLEPLIKEIVARNITGKTWL 294  
300 ASESWAIDPVNLNLTELGLTGLTIGTIOVPIPGSEF-----REMQPO 344  
295 ASEWASSSLIAMPQYFHVVGTTIGFALKAQIPGFRFELKKVHRKSVHNGFAKEFWES 354  
345 A-----GPPPLSRTSQSYTCNQECDCNCLNATLSFTILRLSGE----- 382  
355 TFNCHLGCGAKGPLVDTFLRGH--EESGDRFSNSTAFRL--CTGDENTSSVETPYID 410  
383 ----RVVYSYSAVAVAHALHSLIGC-----DKSTCTKRVVYPMQLBEIKVNF 430  
411 YTHLRISYVAVLAYSIAHALQDIYTCPLGRGLFTNGSCADIKKVEAMQVKKHRLNFT 470  
431 -LLHQIFPDQGVVALLEIYVQWMDRSQNP--FQSAASYPL-----OQLKQIDIS 482  
471 NMGEQVTFDECGDLVGNYSIINMHLSPEDGSIVYKEY-GYVNAVAKKERFETIEEKIL 529  
483 WHTVNTIPMSMCSKRCOSQOKKKPV-GIHYCCFECIDCLPOTFLNHTDEDEYECACPN 541  
530 WSGFREVPFNSCSDCLAGTRKGIIEBEPICCFECVCECPDEYDEI--DASACKKCPDD 588  
589 FWSNENHTSCIAKEIEFISWTEPFGIALTLFAVLGIFLTAFLGVIFIKFRTPPIKANKR 648  
542 EMSYQSETSCFRQQLVLEMHAPTIIVALLAALGFLSTLAILVIFMWHFOTPIYRSAGG 601  
602 PMCFMLLLLVAVNVVVPKVSCTCROALFPLCTITCSCIAVRSFOIYCAR-- 659  
649 ELSTYLLSLLCFSSSLFIFGEPDMTCRLKQAPFGISFVLCISCLIVKTNRLVLEVA 708  
660 KMASRFPRAYSVMWRYOGPYVSMAFITVLKMWIVIGMLARPOSHPRTPDDPKITIVSC 719

709 KIPSPFRK---WMGLNLOFLVFLCTFMOIVLCVIMLYTAPSSYANOELEBEIIPITC 765  
720 NPNRNSLNTSIDLILSVGPFAYMGEKLPNVEAKFITLSMFFYFTSSSLCTFM 779  
766 HEGSLMALGFIYGTCTLLAICFFFAKSRKLPENFEAKFITLSMIFPIWIS--FI 822  
780 SAYSGVLTIVDILVTVANLALSLG---YFGPKCYMILFYPERNT 822  
823 PAVASTYKGFVS-AVEYIALILAAISFGLLACIFPKXIIILFKPSRNT 866

RESULT 12  
US-09-162-021B-2  
Sequence 2, Application US/09162021B  
Patent No. 6337391

GENERAL INFORMATION:  
APPLICANT: H. William Harris  
APPLICANT: Edward M. Brown  
APPLICANT: Steven C. Hebert  
TITLE OF INVENTION: Polycation-Sensing Receptor in Aquatic  
TITLE OF INVENTION: Species and Methods of Use Thereof  
FILE REFERENCE: 2856,1001-007  
CURRENT FILING DATE: 1998-09-28  
PRIOR APPLICATION NUMBER: PCT/US97/05031  
PRIOR FILING DATE: 1997-03-27  
PRIOR APPLICATION NUMBER: 08/622,738  
PRIOR FILING DATE: 1996-03-27  
NUMBER OF SEQ ID NOS: 19  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 2

LENGTH: 1027  
TYPE: PRT  
ORGANISM: aequulus acanthias  
US-09-162-021B-2

Query Match 24.6%; Score 1092.5; DB 4; Length 1027;  
Best Local Similarity 31.0%; Pred. No. 1.1e-94;

Matches 277; Conservative 162; Mismatches 360; Indels 95; Gaps 25;

5 AKTICSLFTLWLAEPANSDPYLP-----GDYLLGGLFSLHANM--KGIYALNPLQ 55  
2 AQLHCQLLFLGFTLLQ--SYNVSGYGPQRAQKKGDIILGLFPIHFGVAKDODLKSPE 60  
56 VPMCKEYEVKIGNLMQAMRFAVEIINDSSLLPGVLLGYEIVDYC-YISNNQVLYFL 114  
61 ATKCIIRYNER--GRWLQAMIFAIIEINSMFTPLNITLGRIFDTCNTVSKALEATLSF 118  
115 LA-HEENLPLICE--DYSNYISRVVAVIGPDNSESVMTVANFLSLFLPQITSAISDEL 171  
119 VAQNKIDSLNDEFCNCSDDHPSITIAVGATGSGISTAVANLGLFYITPOVSASSRL 178  
172 RDKVRPALLRTPSADHVEAMVQMLHFRNMWIIVLVSSDTYGRDNGQLGERVARRD 231  
179 SNKVEYKAPLRTIPNDQATAMAEITEHFQWNVGTIAADDYGRGIDKFEAEAVKRD 238  
232 ICTAFOETLPTLOPNQMTSEERQLVTVDKLQOSTARVYVFSDDLTYAFENEVLK 291  
239 ICIDFSEMI-----SQYTT--OKQLEFIADVIONSSAKVIVVFSNGPDLEPLIOEIVR 290  
292 NFGTAVMIASESWAIDPVNLNLTELGLTGLTIGTIOVPIPGSEFPE----- 340  
291 NITDRIVLASEWASSSLIAKPEYFHVVGTTIGFALPAAGIIPGFKNLKVEHPSRSSDNG 350  
341 ----W-----GPOA--GPPPLSRTSQSYTCNQECDCNCLNAT 370  
351 FVKEFMEETFNCFYTEXTLTLQLKSKVPSHGPAQGGGSKAGNSRTRALRHPCTGEBEIT 410  
371 LSFPTIIRLGERRVVYSYSAVAVAHALHSLIGCDKST-----CTK--RVVYPMQLLE 422  
411 SVETPYLDYTHLRISYVAVLAYSIAHALQDIHCKCKPGTGIIFANGSCADIKKVEAMQVLN 470

Qy 423 EIKVNF-LTDHQLFDPDQGVALHLEIVOMQMDRSQNP--FQSVASY--YPLQROL 475  
Db 471 HLHLKFTMSMBEQVDFDQGLDKGYTIIINQLSAEDSVLFHEGNTAKKAPSDRLN 530  
Qy 476 KNIQDISWHTVNTIIPMSMCKRQSGQKKPV-GIHVCCFECIDCLPGLFNLHTEDEYE 534  
Db 531 INEKLIMSGFQVFPNSCRDVCPTKRGIIEGEPTCCFECMACAESEF--SDENDASA 589  
Qy 535 COACPNMWSYQSESCFKROLVLEHMAPTIAVALLAAGLSTALIVFMRFPQRP 594  
Db 590 CTKCPDPMFNSNHNSTIAKEIEYLSMTPEPGLITFVLGLITSFVLGFIKFRNRP 649  
Qy 595 IYRSGAGPFCFMTLLLVAVYVVPYVGPVKVSTCLCQALFPLCFTICISCIAYRSFQ 654  
Db 650 IYKATRELSYLLFPLICFPSSSLFIEGPRDWTQRLQAPAGISFVLCISILVKTMR 709  
Qy 655 IYCAEFMASRFPRA-YSVVRYQGPVYSAFTVLMKIVIGMLARPOSHPTDDBDK 713  
Db 710 YLVLEP--AKIPTSLRKVVGINTLQPLVFLCLIVQITCIWLVTAPPSYRNHELDE 767  
Qy 714 ITIVSCNPRYNSLLENTSLDLISVVGSPAYMGELEPTNNEAFITLSMTFTYTSV 773  
Db 768 VIFITCDBSGLMALGLIGYTCLLAICFPFAFKSRKLPENNEAFITFSMLIFPIVMI 827  
Qy 774 S-LCTFMSAYSGVLTIVDLVTLVNLALISLGYFG---PKCYMLFYPERT 822  
Db 828 \$TIPAVSTY-GKPVSAVE---VIALIASSFGLGCIYFNKCIILFKPCNT 876

## RESULT 13

US-08-485-588-8  
Sequence 8, Application US/08485588  
Patent No. 5686938

## GENERAL INFORMATION:

APPLICANT: Edward M. Brown  
APPLICANT: Steven C. Hebert  
APPLICANT: Forrest H. Fuller  
APPLICANT: James E. Garrett, Jr.  
TITLE OF INVENTION: CALCIIUM RECEPTOR-ACTIVE  
TITLE OF INVENTION: MOLECULES  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESS: Lyon & Lyon  
STREET: First Interstate World Center  
STREET: Suite 4700  
STREET: 633 West Fifth Street  
CITY: Los Angeles  
STATE: California  
COUNTRY: USA  
ZIP: 90071

## COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: FASTSEQ

## CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/485,588  
FILING DATE: 7 June, 1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA: including application  
PRIOR APPLICATION DATA: described below: 9  
APPLICATION NUMBER: 08/353,784

FILING DATE: 9 December, 1994  
APPLICATION NUMBER: PCT/US/94/12117  
FILING DATE: 21 October, 1994  
APPLICATION NUMBER: U.S. 08/292,827  
FILING DATE: 23 August, 1994  
APPLICATION NUMBER: U.S. 08/141,248  
FILING DATE: 22 October, 1993  
APPLICATION NUMBER: U.S. 08/009,389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017,127

FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 21 August, 1992  
APPLICATION NUMBER: U.S. 07/834,044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749,451  
FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Hebert, Sheldon O.  
REGISTRATION NUMBER: 38,179  
REFERENCE/DOCKET NUMBER: 213/005  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1079 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-485-588-8

## Query Match

24.5%; Score 1088.5; DB 1; Length 1079;

Best Local Similarity 31.7%; Pred. No. 2.8e-94;

Matches 284; Conservative 164; Mismatches 326; Indels 121; Gaps 31;

Qy 10 SLFLLMVALEAPENSDFLP-----GDYLLGLFSIHANMKGI VHLNLFQVPMCKEY 62  
Db 9 ALLALAM-----HSSAYGPDQRAQKKDITLGLFPIHF---GVAARD--QDLKSRPE 56  
Qy 63 EYKVGNYL-----MQARFAVEEINNDSSILPGVLGEIYDVC-YISNNVQPLFYLA 116  
Db 57 SVECIYRNGFRWQLQAMI FALBEINSSPSLLPNMTLGRIFDNTVSKALEATLSFVA 116  
Qy 117 -HEDNLPIQE--DYSNYSIRVAVIIPDNSESVTVANFSLFLLPOTYSAISDELRD 173  
Db 117 QNKIDSLNDFERCNSEHIIPTIAVGVATGSGVSTAVANLLGLFPIQVSYSSRLSLN 176  
Qy 174 KYRFPALLRTPPSADHVEAVQMLHFRMWTIVLVSSDYGRDNGOLLGERVARIDIC 233  
Db 177 KNYKSPFLRTIPNDHQATAMADIIYFRMWWGTIADDVYGRGIEKREAREERDIC 236  
Qy 234 IAFQETLPLQDNQMTSEERQLTYIDKQOSTARVVVSPBLTYHFENEVLQNF 293  
Db 237 IDFSELI-----SQYDDEETQVVEVI--QNSTAKYIVFSSGPDLEPLIKETVRNI 288  
Qy 294 TGAVVIASESMADIVLHNLTEIGH-LGTFIDITIOSVPIPGSEF----- 338  
Db 289 TGRIVLASEMASSSLI-AMPEYFHVVGITIGLQAKQIPQFRFLOKVNHRKSVHNGF 347  
Qy 339 -REMGPOA-----GPPPLSRTSQSYTCNOBCDNCNLTLSFNTILRSGE----- 382  
Db 348 AKEFWEETFNCHLQGAQGLPEVDTFVRSH--EEGNNLNSSTAFRPL--CTGDENINS 403  
Qy 383 -----RVVYSVYSAYVAVAHALSHLGC-----DKSTCKRVVYPMQLEE 423  
Db 404 VETPYMDYEHRLISYVNLAVAYSIAHALQDIYTCIPRGGLFTNGSCADIKKVEAAQVLRH 463  
Qy 424 IWKVNF-LTDHQLFDPDQGVALHLEIVOMQMDRSQNP--FQSVASYPL-----OROL 475  
Db 444 LRHLNFTNMGBEQVDFDQGLVGNYSIINHLSEDSIYFKVY-GYVNYAKGGERLF 522  
Qy 476 KNIQDISWHTVNTIIPMSMCKRQSGQKKPV-GIHVCCFECIDCLPGLFNLHTEDEYE 534  
Db 523 INEKLIMSGFQVFPNSCRDVCQAGTRKGIIEGEPCCFECVCPDGEVSGET--DASA 581  
Qy 535 COACPNMWSYQSESCFKROLVLEHMAPTIAVALLAAGLSTALIVFMRFPQRP 594  
Db 582 CDKCPDPMFNSNHNSTIAKEIEFLAWTEPGIALTLVAVIGIFLTAIVLGVFIKFRNRP 641  
Qy 595 IYRSGAGPFCFMTLLLVAVYVVPYVGPVKVSTCLCQALFPLCFTICISCIAYRSFQ 654

Db 642 IVKATNRELSTYLLFSLCCFSSSLFFIGEPDWTCLROPAFGISFVLICISILVKTNR 701  
 Oy 655 IVCAF--KMASRPPRAVSVMRYOGPVSMATVTLKVVIVIGMLARPOSHPTDPPD 712  
 Db 702 VLVFPEAKIPTSFHRK--WMGLNQLVFLCTMOLILCTIWLTPPSSYRNHELED 758  
 Oy 713 KITIVSCNPYRNSLFTNTSL--DLLISVVGSPFAYMKGELPTNNNEAKFTLSMTFYF 769  
 Db 759 EIIFFITC--HEGSLMALGSLIGYTCLLAICFPFAFKSRKLPENFNEAKFTFSMLIF 815  
 Oy 770 TSSVSLCTFMSAYSGVLVTIVDLVTVNLALISLQ----YFGPKCYMILFPERNT 822  
 Db 816 IWMIS--FIPAYASTYKGFVS-AVEVIALAASFGLLACIFPNKYIILFKSRNT 868  
  
 RESULT 14  
 US-08-484-565-8  
 Sequence 8, Application US/08484565  
 GENERAL INFORMATION:  
 APPLICANT: Edward M. Brown  
 APPLICANT: Steven C. Hebert  
 APPLICANT: James E. Garrett, Jr.  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA  
 ZIP: 90071  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PASTESO  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/484,565  
 FILING DATE: 7 June, 1995  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 PRIOR APPLICATION DATA: including application  
 PRIOR APPLICATION DATA: described below: 9  
 APPLICATION NUMBER: 08/353,784  
 FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US/94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,837  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Hebert, Sheldon O.  
 REGISTRATION/DOCKET NUMBER: 38,179  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEFAX: (213) 955-0440  
 TELEX: 67-3510

; INFORMATION FOR SEQ ID NO: 8:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 1079 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; US-08-484-565-8  
  
 Query Match 24.5%; Score 1088.5; DB 1; Length 1079;  
 Best Local Similarity 31.7%; Pred. No. 2.8e-94;  
 Matches 284; Conservative 164; Mismatches 328; Indels 121; Gaps 31;  
  
 Oy 10 SLFELVLVLAEPANSDFYLP-----GDYLLGGLPSLHANKGIVHLNLFQPMCKEY 62  
 Db 9 ALLALAW-----HSSAYGPDRQAKKGDIIIGLGLPIHF--GVAAKD--ODLKSRPE 56  
 Oy 63 EVKVIQYNTL-----MQMRFAVEIINNDSLLPGVLLGYEIVDVQ-YISNNQPVLYELA 116  
 Db 57 SVECIKRYNFRGFWLQMTFAIEINSSPSLLPMTLVGYRIPTCNTVSALENTLSFVA 116  
 Oy 117 -HEDNLPQIE--DYSNYSRVVAVIGPDNSESVMVAFSLPFLPQITYSASIDELRD 173  
 Db 117 QNKIDSINLDEFKCSHISTIAVVGATGSGYSTAVANILGLFYIPQVYASSRLSN 176  
 Oy 174 KVRFPALLKRTTPSADHNVAMVOLMIFRNWITVLVSSDTYGRDNGQLGERVARDIC 233  
 Db 177 KNGYKSLFRTIPNDHQATAMADIEYFRWNVGTIAADDYGRPGIEKREBEAERDIC 236  
 Oy 234 IAPQETLPTIQPNQNTSEERQRLVTIVDLQOSTARVYVYFSPDLTYHFFEVLRQNF 293  
 Db 237 IDPSELI-----QYSDSEBIQOVVEVI--QNSTAVIVYVFGSGDLEPLKEIVARNI 288  
 Oy 294 TGAVWVMSQMAIDPVVNLNLTGLH-LGTPLGTTIGSPVPIGSEF----- 338  
 Db 289 TGRIMLASQMAASSLI-AMPEYFHVVGITIGGLAAGQIPGRFRLQKHPKSYANGF 347  
 Oy 339 -REWGPOA-----GPPLSRTSQSYTQNOECNCINATLSFNTLRISGE----- 382  
 Db 348 AKERWEETFNCHLOEGAKGPLVDTFVRSH--BEGGRNLINSSTARPL--CTGDENINS 403  
 Oy 383 -----RVVYSYSAVYAVAAHLSLDC-----DKSTCKRVVYPMOLLE 423  
 Db 404 VETPYMDYELHRLSYNYLAVYSIAHALODIYTCLEPGRGLFTGSCADIKVEAMQVLKH 463  
 Oy 424 IWKVNF-LTDHOIFPDGQDVALHLEIVQMWRSONP--FOSVASYPL-----QROL 475  
 Db 464 LRHLNFTNNNGEQVTPDECDDLVGNYSIIMHLSPEBGSIVFKEV-CYVNVYAKKGRLEF 522  
 Oy 476 KNIQDISMHTVNNITIPWSMCKSKQSGQKKRPV-GIHVCCFECIDCLPGFLNHTDEYE 534  
 Db 523 INEKKILMSGFSREVPSPNSCRDQAGTRKGIIEGEPTCCFECVCECPDGEYSGET-DASA 581  
 Oy 535 CQACPNNEWYQSESTGFRQQLVFLFNHEAPTAVALALAGLSTALIVFWRHQT 594  
 Db 582 CDCPDDFWSNENHTSCIAIEFLAWEFGALTLFAVLGIFLTAFLVGVITKFRNTP 641  
 Oy 595 IVSAGGPMFLMLTLVLVAVVVPVYVGPVKTCICRQALPLCTTICISCIASVFO 654  
 Db 642 IVKATNRELSTYLLFSLCCFSSSLFFIGEPDWTCLROPAFGISFVLICISILVKTNR 701  
 Oy 655 IVCAF--KMASRPPRAVSVMRYOGPVSMATVTLKVVIVIGMLARPOSHPTDPPD 712  
 Db 702 VLVFPEAKIPTSFHRK--WMGLNQLVFLCTMOLILCTIWLTPPSSYRNHELED 758  
 Oy 713 KITIVSCNPYRNSLFTNTSL--DLLISVVGSPFAYMKGELPTNNNEAKFTLSMTFYF 769  
 Db 759 EIIFFITC--HEGSLMALGSLIGYTCLLAICFPFAFKSRKLPENFNEAKFTFSMLIF 815  
 Oy 770 TSSVSLCTFMSAYSGVLVTIVDLVTVNLALISLQ----YFGPKCYMILFPERNT 822  
 Db 816 IWMIS--FIPAYASTYKGFVS-AVEVIALAASFGLLACIFPNKYIILFKSRNT 868

```

1      RESULT 15
2      US-08-480-751-8
3      ; Sequence 8, Application US/08480751
4      ; Patent No. 5858684
5      ; GENERAL INFORMATION:
6      ; APPLICANT: Edward F. Nemeth
7      ; APPLICANT: Edward M. Brown
8      ; APPLICANT: Steven C. Hebert
9      ; APPLICANT: Forrest E. Fuller
10     ; APPLICANT: James E. Garrett, Jr.
11     ; TITLE OF INVENTION: CALCULUM RECEPTOR-ACTIVE
12     ; TITLE OF INVENTION: MOLECULES
13     ; NUMBER OF SEQUENCES: 20
14     ; CORRESPONDENCE ADDRESS:
15     ; ADDRESSEE: Lyon & Lyon
16     ; STREET: First Interstate World Center
17     ; STREET: Suite 4700
18     ; STREET: 633 West Fifth Street
19     ; CITY: Los Angeles
20     ; STATE: California
21     ; COUNTRY: USA
22     ; ZIP: 90071
23     ; COMPUTER READABLE FORM:
24     ; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
25     ; COMMENTS: IBM PC compatible
26     ; OPERATING SYSTEM: PC-DOS/MS-DOS
27     ; SOFTWARE: FASTSO
28     ; CURRENT APPLICATION DATA:
29     ; APPLICATION NUMBER: US/08/480,751
30     ; FILING DATE: 7 June, 1995
31     ; CLASSIFICATION: 435
32     ; PRIOR APPLICATION DATA:
33     ; PRIOR APPLICATION DATA: including application
34     ; PRIOR APPLICATION DATA: described below: 9
35     ; APPLICATION NUMBER: 08/353,784
36     ; FILING DATE: 9 December, 1994
37     ; APPLICATION NUMBER: PCT/US/94/12117
38     ; FILING DATE: 21 October, 1994
39     ; APPLICATION NUMBER: U.S. 08/292,827
40     ; FILING DATE: 23 August, 1994
41     ; APPLICATION NUMBER: U.S. 08/141,248
42     ; FILING DATE: 22 October, 1993
43     ; APPLICATION NUMBER: U.S. 08/009,389
44     ; FILING DATE: 23 February, 1993
45     ; APPLICATION NUMBER: U.S. 08/017,127
46     ; FILING DATE: 12 February, 1993
47     ; APPLICATION NUMBER: U.S. 07/934,161
48     ; FILING DATE: 21 August, 1992
49     ; APPLICATION NUMBER: U.S. 07/934,044
50     ; FILING DATE: 11 February, 1992
51     ; APPLICATION NUMBER: U.S. 07/749,451
52     ; FILING DATE: 23 August, 1991
53     ; ATTORNEY/AGENT INFORMATION:
54     ; NAME: Heber, Sheldon O.
55     ; REGISTRATION NUMBER: 38,179
56     ; REFERENCE/DOCKET NUMBER: 213/004
57     ; TELECOMMUNICATION INFORMATION:
58     ; TELEPHONE: (213) 489-1600
59     ; TELEFAX: (213) 955-0440
60     ; TELEX: 67-3510
61     ; INFORMATION FOR SEQ ID NO: 8:
62     ; SEQUENCE CHARACTERISTICS:
63     ; LENGTH: 1079 amino acids
64     ; TYPE: amino acid
65     ; TOPOLOGY: linear
66     ; MOLECULE TYPE: protein
67     ; JS-08-480-751-8

```

**THIS PAGE BLANK (USPTO)**

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 11, 2004, 15:27:42 ; Search time 40.6604 Seconds  
(without alignments)  
5720.583 Million cell updates/sec

Title: US-09-927-315-9

Perfect score: 4443  
Sequence: 1 MGPRAKTICSLFLLWLAE.....ERNTPAYNSMIGYTRRD 838

Scoring table:

BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1140673 seqs, 27756755 residues

Total number of hits satisfying chosen parameters: 1140673

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

Database :

Published Applications AA:\*

1: /cgn2\_6/ptodata/2/pubpaa/US07\_PUBCOMB.pep:\*  
2: /cgn2\_6/ptodata/2/pubpaa/PCT\_NEW\_PUB.pep:\*  
3: /cgn2\_6/ptodata/2/pubpaa/US06\_NEW\_PUB.pep:\*  
4: /cgn2\_6/ptodata/2/pubpaa/US06\_PUBCOMB.pep:\*  
5: /cgn2\_6/ptodata/2/pubpaa/US07\_NEW\_PUB.pep:\*  
6: /cgn2\_6/ptodata/2/pubpaa/PCTUS\_PUBCOMB.pep:\*  
7: /cgn2\_6/ptodata/2/pubpaa/US08\_NEW\_PUB.pep:\*  
8: /cgn2\_6/ptodata/2/pubpaa/US08\_PUBCOMB.pep:\*  
9: /cgn2\_6/ptodata/2/pubpaa/US09A\_PUBCOMB.pep:\*  
10: /cgn2\_6/ptodata/2/pubpaa/US09B\_PUBCOMB.pep:\*  
11: /cgn2\_6/ptodata/2/pubpaa/US09C\_PUBCOMB.pep:\*  
12: /cgn2\_6/ptodata/2/pubpaa/US09D\_NEW\_PUB.pep:\*  
13: /cgn2\_6/ptodata/2/pubpaa/US10A\_PUBCOMB.pep:\*  
14: /cgn2\_6/ptodata/2/pubpaa/US10B\_PUBCOMB.pep:\*  
15: /cgn2\_6/ptodata/2/pubpaa/US10C\_PUBCOMB.pep:\*  
16: /cgn2\_6/ptodata/2/pubpaa/US10\_NEW\_PUB.pep:\*  
17: /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep:\*  
18: /cgn2\_6/ptodata/2/pubpaa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	4443	100.0	838	10	US-09-927-315-9
2	4443	100.0	838	14	US-10-190-417-9
3	4392.5	98.9	839	9	US-09-897-427A-4
4	4392.5	98.9	839	14	US-10-035-045-21
5	4392.5	98.9	839	15	US-10-179-373-6
6	4371.5	98.4	839	14	US-10-246-785-4
7	3514	79.1	669	13	US-10-124-598-7
8	3514	79.1	669	14	US-10-096-144-7
9	3514	79.1	669	14	US-10-225-567A-683
10	3203.5	72.1	843	13	US-10-124-598-1
11	3203.5	72.1	843	14	US-10-096-144-1
12	3203.5	72.1	843	14	US-10-246-785-6
13	3203.5	72.1	843	14	US-10-190-417-7
14	3203.5	72.1	843	15	US-10-179-373-17
15	3203.5	72.1	843	15	US-10-179-373-17

16	3203.5	72.1	843	15	US-10-436-715-38	Sequence 38, Appl
17	3203.5	72.1	843	15	US-10-436-715-70	Sequence 70, Appl
18	3151.5	70.9	843	10	US-09-927-315-8	Sequence 8, Appl
19	3151.5	70.9	843	13	US-10-124-598-2	Sequence 2, Appl
20	3151.5	70.9	843	14	US-10-096-144-2	Sequence 2, Appl
21	3151.5	70.9	843	14	US-10-190-417-8	Sequence 8, Appl
22	2505	56.4	661	14	US-10-246-785-5	Sequence 5, Appl
23	1454	32.7	840	10	US-09-361-652-1	Sequence 1, Appl
24	1454	32.7	840	10	US-09-927-315-1	Sequence 1, Appl
25	1454	32.7	840	14	US-10-246-785-3	Sequence 3, Appl
26	1454	32.7	840	14	US-10-190-417-1	Sequence 1, Appl
27	1454	32.7	840	14	US-10-159-339-12	Sequence 12, Appl
28	1454	32.7	840	15	US-10-179-373-16	Sequence 16, Appl
29	1454	32.7	840	15	US-10-436-715-39	Sequence 39, Appl
30	1454	32.7	840	15	US-10-436-715-69	Sequence 69, Appl
31	1440	32.4	842	15	US-10-436-715-35	Sequence 35, Appl
32	1440	32.4	842	15	US-10-436-715-67	Sequence 67, Appl
33	1434	32.3	842	10	US-09-361-652-2	Sequence 2, Appl
34	1434	32.3	842	10	US-09-927-315-2	Sequence 2, Appl
35	1434	32.3	842	14	US-10-246-785-2	Sequence 2, Appl
36	1434	32.3	842	14	US-10-190-417-2	Sequence 2, Appl
37	1431	32.2	842	15	US-10-436-715-68	Sequence 68, Appl
38	1354	30.5	841	9	US-09-819-946-2	Sequence 2, Appl
39	1354	30.5	841	9	US-09-897-427A-2	Sequence 2, Appl
40	1354	30.5	841	10	US-09-799-629-17	Sequence 17, Appl
41	1354	30.5	841	14	US-10-035-045-17	Sequence 17, Appl
42	1354	30.5	841	14	US-10-190-417-27	Sequence 27, Appl
43	1354	30.5	841	15	US-10-179-373-5	Sequence 5, Appl
44	1353	30.5	841	12	US-10-188-186-2	Sequence 2, Appl
45	1336.5	30.1	840	14	US-10-190-417-3	Sequence 3, Appl

#### ALIGNMENTS

RESULT 1  
US-09-927-315-9  
Sequence 9, Application US/09927315  
Publication No. US20030040045A1  
GENERAL INFORMATION:  
APPLICANT: Zuker, Charles S.  
APPLICANT: Ryda, Nicholas J.P.  
APPLICANT: Nelson, Greg  
APPLICANT: Hoon, Mark A.  
APPLICANT: Chandrasekar, Jayaram  
APPLICANT: Zhang, Yiteng  
APPLICANT: The Regents of the University of California  
APPLICANT: The Government of the United States of America  
APPLICANT: as represented by the Secretary of the  
TITLE OF INVENTION: Department of Health and Human Services  
FILE REFERENCE: 02307E-120110US  
CURRENT APPLICATION NUMBER: US/09/927,315  
CURRENT FILING DATE: 2001-08-10  
PRIOR APPLICATION NUMBER: US 60/302,898  
NUMBER OF SEQ ID NOS: 25  
SOFTWARE: Patent In Ver. 2.1  
SEQ ID NO 9  
LENGTH: 838  
TYPE: PRT  
ORGANISM: Homo sapiens  
FEATURE:  
OTHER INFORMATION: human TR2 sweet taste receptor  
US-09-927-315-9  
Query Match 100.0%; Score 4443; DB 10; Length 838;  
Best local similarity 100.0%; Pred. NO. 0;  
Matches 838; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 MGPRAKTICSLFLLWLAEPAENSDFYLPDGYLLGGLFSLHAMKGIIVHLNPLQVPMCK 60  
Db 1 MGPRAKTICSLFLLWLAEPAENSDFYLPDGYLLGGLFSLHAMKGIIVHLNPLQVPMCK 60

```
QY 61 EYEVKIVGYNLMQAMRFAVEEINNDSSLPGVLLGVEIVDVCIYINNVOPLYFLAHEDN 120
DB 61 EYEVKIVGYNLMQAMRFAVEEINNDSSLPGVLLGVEIVDVCIYINNVOPLYFLAHEDN 120
QY 121 LLLPIQEDYSNYISRVAVVIGPDNSESVMVANFSLFLPQITYSAISDELDRKVRPAL 180
DB 121 LLLPIQEDYSNYISRVAVVIGPDNSESVMVANFSLFLPQITYSAISDELDRKVRPAL 180
QY 181 LRTTPSADHVEAMVQMLHFRNMWIIYVSSDPTGRNQGLGERVARRDICIAFOETL 240
DB 181 LRTTPSADHVEAMVQMLHFRNMWIIYVSSDPTGRNQGLGERVARRDICIAFOETL 240
QY 241 PTLQPNQMTSEERORLVTIVDKLQOSTARVVVPSPLTYHFNENEYLRQNFQAVWIA 300
DB 241 PTLQPNQMTSEERORLVTIVDKLQOSTARVVVPSPLTYHFNENEYLRQNFQAVWIA 300
QY 301 SESWAIDPVHLNLTGLGTLGTTIGSVPIPGSEFERWGPQAGPPLSRTSOSYTCN 360
DB 301 SESWAIDPVHLNLTGLGTLGTTIGSVPIPGSEFERWGPQAGPPLSRTSOSYTCN 360
QY 361 QECNCLNATLSFPTIIRLSGERVYVSAYVAVAHALSLGCDKSTCTKRVVYPWOL 420
DB 361 QECNCLNATLSFPTIIRLSGERVYVSAYVAVAHALSLGCDKSTCTKRVVYPWOL 420
QY 421 LEEIWKVNFLLDHQIFPDQGVALHLEIVQMOMDRSQNPFQSVASYPLQOROLKNIQD 480
DB 421 LEEIWKVNFLLDHQIFPDQGVALHLEIVQMOMDRSQNPFQSVASYPLQOROLKNIQD 480
QY 481 ISMHTVNTTIPMSMCKRQSGQKKKPVGIHVCCFECIDCLPGTFLNHTDEYEQACP 540
DB 481 ISMHTVNTTIPMSMCKRQSGQKKKPVGIHVCCFECIDCLPGTFLNHTDEYEQACP 540
QY 541 NENSYQSTSCFQKQVLFLEHHEAPTIAVALLAAGLSTLAIIVIFRHFQTPIVRSAG 600
DB 541 NENSYQSTSCFQKQVLFLEHHEAPTIAVALLAAGLSTLAIIVIFRHFQTPIVRSAG 600
QY 601 GPMCFMLMTLLVAVMVPPVYVGPVKVSTCLCROALPFLCFTTICISCAVRSFOIVCAF 660
DB 601 GPMCFMLMTLLVAVMVPPVYVGPVKVSTCLCROALPFLCFTTICISCAVRSFOIVCAF 660
QY 661 MASFPRAYSYWRVYQGPVSMFITYLKVIVIGMLARQSHRPDDPKITIVSCN 720
DB 661 MASFPRAYSYWRVYQGPVSMFITYLKVIVIGMLARQSHRPDDPKITIVSCN 720
QY 721 PNYRNSLLFNTSLDLLSVGFSFAYMGKELPTNYNEAKFTTISMTFFTSVSLCTFMS 780
DB 721 PNYRNSLLFNTSLDLLSVGFSFAYMGKELPTNYNEAKFTTISMTFFTSVSLCTFMS 780
QY 781 AYSGLVLTIVDLVTVNLALISLGYFGPKCYMILFYPERNTPAYFNSMIGQYMRD 838
DB 781 AYSGLVLTIVDLVTVNLALISLGYFGPKCYMILFYPERNTPAYFNSMIGQYMRD 838

RESULT 2
US-10-190-417-9
; Sequence 9, Application US/10190417
; Publication No. US20030166137A1
; GENERAL INFORMATION:
; APPLICANT: Zuker, Charles S.
; APPLICANT: Ryba, Nicholas J. P.
; APPLICANT: Chandrasekar, Jayaram
; APPLICANT: Hoon, Mark A.
; APPLICANT: Nelson, Greg
; APPLICANT: Zhang, Yifeng
; APPLICANT: The Regents of the University of California
; APPLICANT: as represented by the United States of America
; APPLICANT: Department of Health and Human Services
; TITLE OF INVENTION: Mammalian Sweet and Amino Acid Heterodimeric Taste
; FILE REFERENCE: 02307E-120130US
; CURRENT APPLICATION NUMBER: US/10-190.417
```

```
; CURRENT FILING DATE: 2002-11-14
; PRIOR APPLICATION NUMBER: US 60/302,898
; PRIOR FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 09/927,315
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: US 60/358,925
; PRIOR FILING DATE: 2002-02-22
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
; LENGTH: 838
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: human T1R2
US-10-190-417-9

Query Match 100.0%; Score 4443; DB 14; Length 838;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 838; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MGRPAKTIQSLFLLVWVLAEPANSDPYLPQDYLLGGLFSLHANMKGIYHLNPLQVPMCK 60
DB 1 MGRPAKTIQSLFLLVWVLAEPANSDPYLPQDYLLGGLFSLHANMKGIYHLNPLQVPMCK 60
QY 61 EYEVKIVGYNLMQAMRFAVEEINNDSSLPGVLLGVEIVDVCIYINNVOPLYFLAHEDN 120
DB 61 EYEVKIVGYNLMQAMRFAVEEINNDSSLPGVLLGVEIVDVCIYINNVOPLYFLAHEDN 120
QY 121 LLLPIQEDYSNYISRVAVVIGPDNSESVMVANFSLFLPQITYSAISDELDRKVRPAL 180
DB 121 LLLPIQEDYSNYISRVAVVIGPDNSESVMVANFSLFLPQITYSAISDELDRKVRPAL 180
QY 181 LRTTPSADHVEAMVQMLHFRNMWIIYVSSDPTGRNQGLGERVARRDICIAFOETL 240
DB 181 LRTTPSADHVEAMVQMLHFRNMWIIYVSSDPTGRNQGLGERVARRDICIAFOETL 240
QY 241 PTLQPNQMTSEERORLVTIVDKLQOSTARVVVPSPLTYHFNENEYLRQNFQAVWIA 300
DB 241 PTLQPNQMTSEERORLVTIVDKLQOSTARVVVPSPLTYHFNENEYLRQNFQAVWIA 300
QY 301 SESWAIDPVHLNLTGLGTLGTTIGSVPIPGSEFERWGPQAGPPLSRTSOSYTCN 360
DB 301 SESWAIDPVHLNLTGLGTLGTTIGSVPIPGSEFERWGPQAGPPLSRTSOSYTCN 360
QY 361 QECNCLNATLSFPTIIRLSGERVYVSAYVAVAHALSLGCDKSTCTKRVVYPWOL 420
DB 361 QECNCLNATLSFPTIIRLSGERVYVSAYVAVAHALSLGCDKSTCTKRVVYPWOL 420
QY 421 LEEIWKVNFLLDHQIFPDQGVALHLEIVQMOMDRSQNPFQSVASYPLQOROLKNIQD 480
DB 421 LEEIWKVNFLLDHQIFPDQGVALHLEIVQMOMDRSQNPFQSVASYPLQOROLKNIQD 480
QY 481 ISMHTVNTTIPMSMCKRQSGQKKKPVGIHVCCFECIDCLPGTFLNHTDEYEQACP 540
DB 481 ISMHTVNTTIPMSMCKRQSGQKKKPVGIHVCCFECIDCLPGTFLNHTDEYEQACP 540
QY 541 NENSYQSTSCFQKQVLFLEHHEAPTIAVALLAAGLSTLAIIVIFRHFQTPIVRSAG 600
DB 541 NENSYQSTSCFQKQVLFLEHHEAPTIAVALLAAGLSTLAIIVIFRHFQTPIVRSAG 600
QY 601 GPMCFMLMTLLVAVMVPPVYVGPVKVSTCLCROALPFLCFTTICISCAVRSFOIVCAF 660
DB 601 GPMCFMLMTLLVAVMVPPVYVGPVKVSTCLCROALPFLCFTTICISCAVRSFOIVCAF 660
QY 661 MASFPRAYSYWRVYQGPVSMFITYLKVIVIGMLARQSHRPDDPKITIVSCN 720
DB 661 MASFPRAYSYWRVYQGPVSMFITYLKVIVIGMLARQSHRPDDPKITIVSCN 720
QY 721 PNYRNSLLFNTSLDLLSVGFSFAYMGKELPTNYNEAKFTTISMTFFTSVSLCTFMS 780
DB 721 PNYRNSLLFNTSLDLLSVGFSFAYMGKELPTNYNEAKFTTISMTFFTSVSLCTFMS 780
```

QY 781 AYSGLVTVITVDLTVLVNLLAISLGYFGPKCYMILFPERNTPAYENSMIOGYTMRD 838  
DB 781 AYSGLVTVITVDLTVLVNLLAISLGYFGPKCYMILFPERNTPAYENSMIOGYTMRD 838

RESULT 3  
US-09-897-427A-4  
; Sequence 4, Application US/09897427A  
; Patent No. US20020160424A1  
; GENERAL INFORMATION:  
; APPLICANT: ADLER, JON ELLIOT  
; APPLICANT: LI, XIADONG  
; APPLICANT: STASZEWSKI, LENA  
; APPLICANT: XU HONG  
; APPLICANT: EHEVERRI, FERNANDO  
; TITLE OF INVENTION: T1R HETERO-OLIGOMERIC TASTE RECEPTORS  
; FILE REFERENCE: 078003-0282558  
; CURRENT APPLICATION NUMBER: US/09/897,427A  
; CURRENT FILING DATE: 2001-07-03  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4  
; LENGTH: 839  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-897-427A-4

Query Match 98.9%; Score 4392.5; DB 9; Length 839;  
Best Local Similarity 99.3%; Pred. No. 0;  
Matches 833; Conservative 0; Mismatches 5; Indels 1; Gaps 1;

QY 1 MGPRAKTICSLFLLMVLAEPAENSDFYLPDYLGLGFLSLHANKGIVHLNFILOVPMCK 60  
DB 1 MGPRAKTICSLFLLMVLAEPAENSDFYLPDYLGLGFLSLHANKGIVHLNFILOVPMCK 60

QY 61 EYEVAVIGYNLMQAMRFAVEEINNDSSLPGVLLGVEIYDVICYISNNQPVLYFLAHEDN 120  
DB 61 EYEVAVIGYNLMQAMRFAVEEINNDSSLPGVLLGVEIYDVICYISNNQPVLYFLAHEDN 120

QY 121 LLPIOEDYSNYSIRVVAIVGPDNSESVMTVANFSLFLPQITTSASIDELDKVRFPAL 180  
DB 121 LLPIOEDYSNYSIRVVAIVGPDNSESVMTVANFSLFLPQITTSASIDELDKVRFPAL 180

QY 121 LLPIOEDYSNYSIRVVAIVGPDNSESVMTVANFSLFLPQITTSASIDELDKVRFPAL 180  
DB 121 LLPIOEDYSNYSIRVVAIVGPDNSESVMTVANFSLFLPQITTSASIDELDKVRFPAL 180

QY 181 LRTTSSADHVEAMQVLMHFRMNMIIYVSSDTYGRDNGQLGERVARDDICIAFOETL 240  
DB 181 LRTTSSADHVEAMQVLMHFRMNMIIYVSSDTYGRDNGQLGERVARDDICIAFOETL 240

QY 241 PTLQPNOMNTSEERORLVTIYDKLQOSTARVVVFPDLTLHFNEVLRONFTGAWIA 300  
DB 241 PTLQPNOMNTSEERORLVTIYDKLQOSTARVVVFPDLTLHFNEVLRONFTGAWIA 300

QY 301 SESMAIDVLANLTELGLGFLGTTIOSVPIPGSEPREMGPOAGPPLSRTSOSYTCN 360  
DB 301 SESMAIDVLANLTELGLGFLGTTIOSVPIPGSEPREMGPOAGPPLSRTSOSYTCN 360

QY 301 SESMAIDVLANLTELGLGFLGTTIOSVPIPGSEPREMGPOAGPPLSRTSOSYTCN 360  
DB 301 SESMAIDVLANLTELGLGFLGTTIOSVPIPGSEPREMGPOAGPPLSRTSOSYTCN 360

QY 361 QECDCNLAATLSFNTIIRLSGERVYVSAYSAVAHAHSLGCDKSTCTKRVVYPMQL 420  
DB 361 QECDCNLAATLSFNTIIRLSGERVYVSAYSAVAHAHSLGCDKSTCTKRVVYPMQL 420

QY 421 LEEIKVNPFTLIDHOIFPDPOGVALHLEIYOMONDRSONPQOSVASYPLOROLKNIOD 480  
DB 421 LEEIKVNPFTLIDHOIFPDPOGVALHLEIYOMONDRSONPQOSVASYPLOROLKNIOD 480

QY 481 LEEIKVNPFTLIDHOIFPDPOGVALHLEIYOMONDRSONPQOSVASYPLOROLKNIOD 480  
DB 481 LEEIKVNPFTLIDHOIFPDPOGVALHLEIYOMONDRSONPQOSVASYPLOROLKNIOD 480

QY 540 481 ISMHTVNNITIPMSKSKRCQSGOKKPVGIHVCCECIDCLPGTFLNHTEDYECQACPN 540  
DB 540 481 ISMHTVNNITIPMSKSKRCQSGOKKPVGIHVCCECIDCLPGTFLNHTEDYECQACPN 540

QY 600 541 NEMSVQSTSCFKRQVLEMEHAPITIAVALLAAGFLSTALIVIFPMRHFTPIVRSAG 600  
DB 600 541 NEMSVQSTSCFKRQVLEMEHAPITIAVALLAAGFLSTALIVIFPMRHFTPIVRSAG 600

QY 600 541 NEMSVQSTSCFKRQVLEMEHAPITIAVALLAAGFLSTALIVIFPMRHFTPIVRSAG 600  
DB 600 541 NEMSVQSTSCFKRQVLEMEHAPITIAVALLAAGFLSTALIVIFPMRHFTPIVRSAG 600

QY 660 601 GPMCFMLTLLLVAVMVVVPVSTCLCRQLFPLCFTICTIAVRSFOIVCAFK 660  
DB 660 601 GPMCFMLTLLLVAVMVVVPVSTCLCRQLFPLCFTICTIAVRSFOIVCAFK 660

DB 601 GPMCFMLTLLLVAVMVVVPVSTCLCRQLFPLCFTICTIAVRSFOIVCAFK 660  
QY 661 MASPPRAYSTWMTYQGYVMAFTYUKMIVYIGMLARQOS-HPRDPDPDKTITVSC 719  
DB 661 MASPPRAYSTWMTYQGYVMAFTYUKMIVYIGMLATGUSPTTRDPDPDKTITVSC 720

QY 720 NPNYRNSLFTNTSDLLSVGFSFAYVNGKELPTNYNAKFTITLMTPEFTSSVSLCTFM 779  
DB 721 NPNYRNSLFTNTSDLLSVGFSFAYVNGKELPTNYNAKFTITLMTPEFTSSVSLCTFM 780

QY 780 SAYSGVTVITVDLTVLVNLLAISLGYFGPKCYMILFPERNTPAYENSMIOGYTMRD 838  
DB 781 SAYSGVTVITVDLTVLVNLLAISLGYFGPKCYMILFPERNTPAYENSMIOGYTMRD 839

RESULT 4  
US-10-035-045-21  
; Sequence 21, Application US/10035045  
; Publication No. US2003005448A1  
; GENERAL INFORMATION:  
; APPLICANT: ADLER, JON ELLIOT  
; APPLICANT: LI, XIADONG  
; APPLICANT: STASZEWSKI, LENA  
; APPLICANT: O'CONNELL, SHAWN  
; APPLICANT: ZOZULYA, SERGEY  
; TITLE OF INVENTION: T1R TASTE RECEPTORS AND GENES ENCODING SAME  
; FILE REFERENCE: 078003-0280681  
; CURRENT APPLICATION NUMBER: US/10/035,045  
; CURRENT FILING DATE: 2002-01-03  
; PRIOR APPLICATION NUMBER: 60/259,227  
; PRIOR FILING DATE: 2001-01-03  
; PRIOR APPLICATION NUMBER: 60/284,547  
; PRIOR FILING DATE: 2001-04-19  
; NUMBER OF SEQ ID NOS: 24  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 21  
; LENGTH: 839  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-035-045-21

Query Match 98.9%; Score 4392.5; DB 14; Length 839;  
Best Local Similarity 99.3%; Pred. No. 0;  
Matches 833; Conservative 0; Mismatches 5; Indels 1; Gaps 1;

QY 1 MGPRAKTICSLFLLMVLAEPAENSDFYLPDYLGLGFLSLHANKGIVHLNFILOVPMCK 60  
DB 1 MGPRAKTICSLFLLMVLAEPAENSDFYLPDYLGLGFLSLHANKGIVHLNFILOVPMCK 60

QY 61 EYEVAVIGYNLMQAMRFAVEEINNDSSLPGVLLGVEIYDVICYISNNQPVLYFLAHEDN 120  
DB 61 EYEVAVIGYNLMQAMRFAVEEINNDSSLPGVLLGVEIYDVICYISNNQPVLYFLAHEDN 120

QY 121 LLPIOEDYSNYSIRVVAIVGPDNSESVMTVANFSLFLPQITTSASIDELDKVRFPAL 180  
DB 121 LLPIOEDYSNYSIRVVAIVGPDNSESVMTVANFSLFLPQITTSASIDELDKVRFPAL 180

QY 181 LRTTSSADHVEAMQVLMHFRMNMIIYVSSDTYGRDNGQLGERVARDDICIAFOETL 240  
DB 181 LRTTSSADHVEAMQVLMHFRMNMIIYVSSDTYGRDNGQLGERVARDDICIAFOETL 240

QY 241 PTLQPNOMNTSEERORLVTIYDKLQOSTARVVVFPDLTLHFNEVLRONFTGAWIA 300  
DB 241 PTLQPNOMNTSEERORLVTIYDKLQOSTARVVVFPDLTLHFNEVLRONFTGAWIA 300

QY 300 241 PTLQPNOMNTSEERORLVTIYDKLQOSTARVVVFPDLTLHFNEVLRONFTGAWIA 300  
DB 300 241 PTLQPNOMNTSEERORLVTIYDKLQOSTARVVVFPDLTLHFNEVLRONFTGAWIA 300

QY 360 301 SESMAIDVLANLTELGLGFLGTTIOSVPIPGSEPREMGPOAGPPLSRTSOSYTCN 360  
DB 360 301 SESMAIDVLANLTELGLGFLGTTIOSVPIPGSEPREMGPOAGPPLSRTSOSYTCN 360

QY 360 301 SESMAIDVLANLTELGLGFLGTTIOSVPIPGSEPREMGPOAGPPLSRTSOSYTCN 360  
DB 360 301 SESMAIDVLANLTELGLGFLGTTIOSVPIPGSEPREMGPOAGPPLSRTSOSYTCN 360

QY 420 361 QECDCNLAATLSFNTIIRLSGERVYVSAYSAVAHAHSLGCDKSTCTKRVVYPMQL 420  
DB 420 361 QECDCNLAATLSFNTIIRLSGERVYVSAYSAVAHAHSLGCDKSTCTKRVVYPMQL 420

Qy 421 LEEIWKVNFLLDHOIFPDPOGDVALHLEIVQMOMDRSQNPQSVASYYPLOQOLKNIQD 480  
Db 421 LEEIWKVNFLLDHOIFPDPOGDVALHLEIVQMOMDRSQNPQSVASYYPLOQOLKNIQD 480  
Qy 481 ISMHTVNNITIPMSKSGKRCQSGQKKRPVGIHVCCECIDCLPGTFLNTEDEYECQACP 540  
Db 481 ISMHTVNNITIPMSKSGKRCQSGQKKRPVGIHVCCECIDCLPGTFLNTEDEYECQACP 540  
Qy 541 NEMSYQSETSCPKROLVLEHMEAPTIAVALLAALGFLSTLAILVIFMRHFOPTIVRSAG 600  
Db 541 NEMSYQSETSCPKROLVLEHMEAPTIAVALLAALGFLSTLAILVIFMRHFOPTIVRSAG 600  
Qy 601 GPMCFMLTLTLLVAVVWVPPYVGPVKSTCLCQALFPLCFTICISCIASVRSQIVCAF 660  
Db 601 GPMCFMLTLTLLVAVVWVPPYVGPVKSTCLCQALFPLCFTICISCIASVRSQIVCAF 660  
Qy 661 MASRPPRAYSYWRYQGPVYSMAFITVLMVIVIGMLARPOS-HPRTPDDPKITIVSC 719  
Db 661 MASRPPRAYSYWRYQGPVYSMAFITVLMVIVIGMLARPOS-HPRTPDDPKITIVSC 720  
Qy 720 NPNYRNSLLFNTSLDLTLLSVGFSFAYMGKELPTVYNEAKFITLSMTFFTSVSLCTFM 779  
Db 721 NPNYRNSLLFNTSLDLTLLSVGFSFAYMGKELPTVYNEAKFITLSMTFFTSVSLCTFM 780  
Qy 780 SAYSGVLVTIVDLVTVLNLALSLGFGPKCYMLFPYPERNTPAYFNSMIQGYTMRD 838  
Db 781 SAYSGVLVTIVDLVTVLNLALSLGFGPKCYMLFPYPERNTPAYFNSMIQGYTMRD 839

RESULT 5  
US-10-179-373-6  
: Sequence 6, Application US/10179373  
: Publication No. US20030232407A1  
: GENERAL INFORMATION:  
: APPLICANT: ZOLLER, MARK  
: APPLICANT: LI, XIAODONG  
: APPLICANT: STASZEWSKI, LENA  
: APPLICANT: O'CONNELL, SHAWN  
: APPLICANT: ZOZULYA, SERGEY  
: APPLICANT: ADLER, JON  
: APPLICANT: XU, HONG  
: APPLICANT: ECHEVERRI, FERNANDO  
: TITLE OF INVENTION: T1R HETERO-OLIGOMERIC TASTE RECEPTORS AND CELL LINES  
: TITLE OF INVENTION: THAT EXPRESS SAID RECEPTORS AND USE THEREOF FOR  
: TITLE OF INVENTION: IDENTIFICATION OF TASTE COMPOUNDS  
: FILE REFERENCE: 078003-0291566  
: CURRENT APPLICATION NUMBER: US/10/179.373  
: PRIOR FILING DATE: 2002-06-26  
: PRIOR APPLICATION NUMBER: 60/300,434  
: PRIOR FILING DATE: 2001-06-26  
: PRIOR APPLICATION NUMBER: 60/304,749  
: PRIOR FILING DATE: 2001-07-13  
: PRIOR APPLICATION NUMBER: 60/310,493  
: PRIOR FILING DATE: 2001-08-08  
: PRIOR APPLICATION NUMBER: 60/331,771  
: PRIOR FILING DATE: 2001-11-21  
: PRIOR APPLICATION NUMBER: 60/339,472  
: PRIOR FILING DATE: 2001-12-14  
: PRIOR APPLICATION NUMBER: 60/372,090  
: PRIOR FILING DATE: 2002-04-15  
: PRIOR APPLICATION NUMBER: 60/374,143  
: PRIOR FILING DATE: 2002-04-22  
: NUMBER OF SEQ ID NOS: 19  
: SOFTWARE: PatentIn Ver. 2.1  
: SEQ ID NO: 6  
: LENGTH: 839  
: TYPE: PRT  
: ORGANISM: Homo sapiens  
US-10-179-373-6

Query Match 98.9%; Score 4392.5; DB 15; Length 839;  
Best Local Similarity 99.3%; Pred. No. 0;  
Matches 833; Conservative 0; Mismatches 5; Indels 1; Gaps 1;

Qy 1 MGPRAKTICSLFPLLMVLAEPASNDPFLPGDYLLGGLFSLHANKGIVHLNPLQVPMCK 60  
Db 1 MGPRAKTICSLFPLLMVLAEPASNDPFLPGDYLLGGLFSLHANKGIVHLNPLQVPMCK 60  
Qy 61 EYEVKVIQVIMQAMRPAVEBINNDSLLPGVLGYEIVDVCY1SNNVQPVLYFLAEDN 120  
Db 61 EYEVKVIQVIMQAMRPAVEBINNDSLLPGVLGYEIVDVCY1SNNVQPVLYFLAEDN 120  
Qy 121 LLPQEDYSNYSISVVAVVIGDSESVMTVANFLSLFLQITYSAISDELDRKVRPAL 180  
Db 121 LLPQEDYSNYSISVVAVVIGDSESVMTVANFLSLFLQITYSAISDELDRKVRPAL 180  
Qy 181 LRTTSPADHVEAVQMLHFRMNMIIVLVSDTYGDRNQLGERVARRDICIAPQETL 240  
Db 181 LRTTSPADHVEAVQMLHFRMNMIIVLVSDTYGDRNQLGERVARRDICIAPQETL 240  
Qy 241 PTLQPNQNMTESEERQRLVTIVDKLQOSTARVVVFSDDLTYHFNENVLBNFTGAVMIA 300  
Db 241 PTLQPNQNMTESEERQRLVTIVDKLQOSTARVVVFSDDLTYHFNENVLBNFTGAVMIA 300  
Qy 301 SESWAIDPVLANLTELGLGTFGLGTTIQSVPIQGFSEFRMGQAGPPLSRYSQSTCN 360  
Db 301 SESWAIDPVLANLTELGLGTFGLGTTIQSVPIQGFSEFRMGQAGPPLSRYSQSTCN 360  
Qy 361 QECNCLNATLSFNTILRLGERVYVSAYVAVAHALSLGCDKSTCTKRVVYPMOL 420  
Db 361 QECNCLNATLSFNTILRLGERVYVSAYVAVAHALSLGCDKSTCTKRVVYPMOL 420  
Qy 421 LEEIWKVNFLLDHOIFPDPOGDVALHLEIVQMOMDRSQNPQSVASYYPLOQOLKNIQD 480  
Db 421 LEEIWKVNFLLDHOIFPDPOGDVALHLEIVQMOMDRSQNPQSVASYYPLOQOLKNIQD 480  
Qy 481 ISMHTVNNITIPMSKSGKRCQSGQKKRPVGIHVCCECIDCLPGTFLNTEDEYECQACP 540  
Db 481 ISMHTVNNITIPMSKSGKRCQSGQKKRPVGIHVCCECIDCLPGTFLNTEDEYECQACP 540  
Qy 541 NEMSYQSETSCPKROLVLEHMEAPTIAVALLAALGFLSTLAILVIFMRHFOPTIVRSAG 600  
Db 541 NEMSYQSETSCPKROLVLEHMEAPTIAVALLAALGFLSTLAILVIFMRHFOPTIVRSAG 600  
Qy 601 GPMCFMLTLTLLVAVVWVPPYVGPVKSTCLCQALFPLCFTICISCIASVRSQIVCAF 660  
Db 601 GPMCFMLTLTLLVAVVWVPPYVGPVKSTCLCQALFPLCFTICISCIASVRSQIVCAF 660  
Qy 661 MASRPPRAYSYWRYQGPVYSMAFITVLMVIVIGMLARPOS-HPRTPDDPKITIVSC 719  
Db 661 MASRPPRAYSYWRYQGPVYSMAFITVLMVIVIGMLARPOS-HPRTPDDPKITIVSC 720  
Qy 720 NPNYRNSLLFNTSLDLTLLSVGFSFAYMGKELPTVYNEAKFITLSMTFFTSVSLCTFM 779  
Db 721 NPNYRNSLLFNTSLDLTLLSVGFSFAYMGKELPTVYNEAKFITLSMTFFTSVSLCTFM 780  
Qy 780 SAYSGVLVTIVDLVTVLNLALSLGFGPKCYMLFPYPERNTPAYFNSMIQGYTMRD 838  
Db 781 SAYSGVLVTIVDLVTVLNLALSLGFGPKCYMLFPYPERNTPAYFNSMIQGYTMRD 839

RESULT 6  
US-10-246-785-4  
: Sequence 4, Application US/10246785  
: Publication No. US20030148448A1  
: GENERAL INFORMATION:  
: APPLICANT: IRM, LLC  
: APPLICANT: The Scripps Research Institute  
: APPLICANT: Liao, Jiayu  
: APPLICANT: Sheng, Ding  
: APPLICANT: Schults, Peter G  
: TITLE OF INVENTION: Sweet Taste Receptors  
: FILE REFERENCE: 36-002810US/PC  
: CURRENT APPLICATION NUMBER: US/10/246.785  
: PRIOR FILING DATE: 2002-12-09  
: PRIOR APPLICATION NUMBER: US 60/323,450

PRIOR FILING DATE: 2001-09-18  
NUMBER OF SEQ ID NOS: 22  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 4  
LENGTH: 839  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-246-795-4

Query Match 98.4%; Score 4371.5; DB 14; Length 839;  
Best Local Similarity 98.7%; Pred. No. 0;  
Matches 828; Conservative 2; Mismatches 8; Indels 1; Gaps 1;

```
QY 1 MGPRAKTSIFLFLVLAEPANSPFVLPQYLLGGLSLANKKGIYHLPLOVPMCK 60
DB 1 MGPRAKTSIFLFLVLAEPANSPFVLPQYLLGGLSLANKKGIYHLPLOVPMCK 60
QY 61 EYEVKVIQYINLMQAMFAVEEINNDSSLPGVLLAGEYIVDVCYISNNQPVLYFLAHEDN 120
DB 61 EYEVKVIQYINLMQAMFAVEEINNDSSLPGVLLAGEYIVDVCYISNNQPVLYFLAHEDN 120
QY 121 LIPIDEDYSNYISRAVAVIGPDNSESVMVAFSLFLPQITYSASIDELDKYRFPAL 180
DB 121 LIPIDEDYSNYISRAVAVIGPDNSESVMVAFSLFLPQITYSASIDELDKYRFPAL 180
QY 181 LATTESADHVEAMQMLHFRNMNITIVSSDTYGRDNGQLGERVARDCIAFOETL 240
DB 181 LATTESADHVEAMQMLHFRNMNITIVSSDTYGRDNGQLGERVARDCIAFOETL 240
QY 241 PTLQPNQNMNTSEERQRLVTVDKLOOSTARVVVVFSPDLTLHFENEVLRONFTGAWIA 300
DB 241 PTLQPNQNMNTSEERQRLVTVDKLOOSTARVVVVFSPDLTLHFENEVLRONFTGAWIA 300
QY 301 SESMAIDPVLANLTELGHGTLGTLTIGSVPIPGSEFEFEWGPQAGPPLSRTSOSYTCN 360
DB 301 SESMAIDPVLANLTELGHGTLGTLTIGSVPIPGSEFEFEWGPQAGPPLSRTSOSYTCN 360
QY 361 OECDNCNANTLSFNTILRISGERVYVSVYSAVAHAHSLGCDKSTCTGRVYVPMQL 420
DB 361 OECDNCNANTLSFNTILRISGERVYVSVYSAVAHAHSLGCDKSTCTGRVYVPMQL 420
QY 421 LEEIKVNFETLLDHOIFPDPOGVALHLEIVOMQDRSONFQSVASYPLOROLKNID 480
DB 421 LEEIKVNFETLLDHOIFPDPOGVALHLEIVOMQDRSONFQSVASYPLOROLKNID 480
QY 481 ISMHTVNTTIPMSCKSKRCQSGQKKKPVGIHVCCEFCIDCLPOTFLNHTEDYEEOACPN 540
DB 481 ISMHTVNTTIPMSCKSKRCQSGQKKKPVGIHVCCEFCIDCLPOTFLNHTEDYEEOACPN 540
QY 541 NEMSVOSSESCFRQRLVLEHMEAPRTIAVALLAAGFLSTALIVYFMHFOPTIVRSAG 600
DB 541 NEMSVOSSESCFRQRLVLEHMEAPRTIAVALLAAGFLSTALIVYFMHFOPTIVRSAG 600
QY 601 GPMCLMLTLVLVAVVAVVYVGPVKVSTCLCRQALFPLCTTICISCIASVRSFOIVCAFK 660
DB 601 GPMCLMLTLVLVAVVAVVYVGPVKVSTCLCRQALFPLCTTICISCIASVRSFOIVCAFK 660
QY 661 MASRPRAVSVMRYOGPYVMAFITVLMVIVIGMLARPOS-HPRTPDDPKITIVSC 719
DB 661 MASRPRAVSVMRYOGPYVMAFITVLMVIVIGMLARPOS-HPRTPDDPKITIVSC 719
QY 720 NNNYNSNLLFNTSLDLLSVGFSFAYMKEPLPTYNNEAKFTLTSMTFFFTSSVSLCTFM 779
DB 720 NNNYNSNLLFNTSLDLLSVGFSFAYMKEPLPTYNNEAKFTLTSMTFFFTSSVSLCTFM 779
QY 780 SAYSGVLVTVLTVLNLALSLGYPGPKCYMLIFPERNTPAYFNSMIGYTRRD 838
DB 780 SAYSGVLVTVLTVLNLALSLGYPGPKCYMLIFPERNTPAYFNSMIGYTRRD 838
```

RESULT 7  
US-10-124-598-7  
Sequence 7, Application US/10124598

Publication No. US20020119526A1  
GENERAL INFORMATION:  
APPLICANT: Zuker, Charles S.  
APPLICANT: Adler, Jon Elliot  
APPLICANT: Lindemeier, Uerger  
APPLICANT: The Regents of the University of California  
TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor  
FILE REFERENCE: 02307E-088720US  
CURRENT APPLICATION NUMBER: US/10/124,598  
PRIORITY FILING DATE: 2002-04-16  
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/361,631  
PRIOR FILING DATE: EARLIER FILING DATE: 1999-07-27  
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/112,747  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 7  
LENGTH: 669  
TYPE: PRT  
ORGANISM: Homo sapiens  
FEATURE:  
OTHER INFORMATION: human G-protein coupled receptor (GPCR) B4 amino  
US-10-124-598-7

Query Match 79.1%; Score 3514; DB 13; Length 669;  
Best Local Similarity 98.4%; Pred. No. 0;  
Matches 666; Conservative 1; Mismatches 2; Indels 8; Gaps 2;

```
QY 162 ITYSASIDELDKYRFPALTLTPSADHVEAMQMLHFRNMNITIVSSDTYGRDNGQ 221
DB 1 ITYSASIDELDKYRFPALTLTPSADHVEAMQMLHFRNMNITIVSSDTYGRDNGQ 221
QY 222 LIGERVARDCIAFOETLPTLQPNQNMNTSEERQRLVTVDKLOOSTARVVVVFSPDLTL 281
DB 222 LIGERVARDCIAFOETLPTLQPNQNMNTSEERQRLVTVDKLOOSTARVVVVFSPDLTL 281
QY 282 YHFEVNLRONFTGAWIAVIASSMAIDPVLANLTELGHGTLGTLTIGSVPIPGSEFEFEW 341
DB 282 YHFEVNLRONFTGAWIAVIASSMAIDPVLANLTELGHGTLGTLTIGSVPIPGSEFEFEW 341
QY 342 GPOAGPPLSRTSOSYTCNOECDNCNANTLSFNTILRISGERVYVSVYSAVAHAHSL 401
DB 342 GPOAGPPLSRTSOSYTCNOECDNCNANTLSFNTILRISGERVYVSVYSAVAHAHSL 401
QY 402 LIGCDKSTCTGRVYVPMQLLEEIKVNFETLLDHOIFPDPOGVALHLEIVOMQDRSONP 461
DB 402 LIGCDKSTCTGRVYVPMQLLEEIKVNFETLLDHOIFPDPOGVALHLEIVOMQDRSONP 461
QY 462 FOSVASVYPLOROLKNIDISMHTVNTTIPMSCKSKRCQSGQKKKPVGIHVCCEFCIDCL 521
DB 462 FOSVASVYPLOROLKNIDISMHTVNTTIPMSCKSKRCQSGQKKKPVGIHVCCEFCIDCL 521
QY 522 PGTFLNHTEDYEEOACPNEMSVOSSESCFRQRLVLEHMEAPRTIAVALLAAGFLSTL 581
DB 522 PGTFLNHTEDYEEOACPNEMSVOSSESCFRQRLVLEHMEAPRTIAVALLAAGFLSTL 581
QY 582 AILVIFMHHFOTPIVRSAGPMLTLVLVAVVAVVYVGPVKVSTCLCRQALFPLCF 641
DB 582 AILVIFMHHFOTPIVRSAGPMLTLVLVAVVAVVYVGPVKVSTCLCRQALFPLCF 641
QY 642 TITICISCIASVRSFOIVCAFKMASRPRAVSVMRYOGPYVMAFITVLMVIVIGMLARP 701
DB 642 TITICISCIASVRSFOIVCAFKMASRPRAVSVMRYOGPYVMAFITVLMVIVIGMLARP 701
QY 702 OSHPRTPDDPKITIVSCNPNYNSNLLFNTSLDLLSVGFSFAYMKEPLPTYNNEAKFT 761
DB 702 OSHPRTPDDPKITIVSCNPNYNSNLLFNTSLDLLSVGFSFAYMKEPLPTYNNEAKFT 761
QY 762 TLSMTFFFTSSVSLCTFMSASGVLTIVDLTVLNLALSLGYPGPKCYMLIFPERN 821
DB 762 TLSMTFFFTSSVSLCTFMSASGVLTIVDLTVLNLALSLGYPGPKCYMLIFPERN 821
```

Oy 822 TPAYNSMIOGYTMRD 838  
Db 653 TPAYNSMIOGYTMRD 669

## RESULT 8

US-10-096-144-7  
; Sequence 7, Application US/10096144  
; Publication No. US2003002288A1  
; GENERAL INFORMATION:  
; APPLICANT: Zuker, Charles S.  
; APPLICANT: Adler, Jon Elliot  
; APPLICANT: Lindemeier, Juergen  
; APPLICANT: The Regents of the University of California  
; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor  
; TITLE OF INVENTION: Involved in Sensory Transduction  
; FILE REFERENCE: 02307E-088720US  
; CURRENT APPLICATION NUMBER: US/10/096,144  
; PRIOR FILING DATE: 2002-03-08  
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/361,631  
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-07-27  
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/095,464  
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-07-28  
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/112,747  
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-17  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 7  
; LENGTH: 669  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; OTHER INFORMATION: human G-protein coupled receptor (GPCR) B4 amino  
; US-10-096-144-7

Query Match 79.1%; Score 3514; DB 14; Length 669;  
Best Local Similarity 98.4%; Pred. No. 0;  
Matches 666; Conservative 1; Mismatches 2; Indels 8; Gaps 2;

Oy 162 ITTSAISDELDRKVRFPALRTTPSADHVEAMVOLMHPFNMWIIYLVSSDTYGRDNGQ 221  
Db 1 ITTSAISDELDRKVRFPALRTTPSADHVEAMVOLMHPFNMWIIYLVSSDTYGRDNGQ 60  
Oy 222 LIGERVARRDICIAFOETLPTLOPNOMTSEERQRLVTIVDKLOOSTARVVVFPDLTL 281  
Db 61 LIGERVARRDICIAFOETLPTLOPNOMTSEERQRLVTIVDKLOOSTARVVVFPDLTL 120  
Oy 282 YHFEVEVLKQNFCAVMIASBSMAIDPVLNLTGLHGTFLGTTIOSVPIPGSEPREW 341  
Db 121 YHFEVEVLKQNFCAVMIASBSMAIDPVLNLTGLHGTFLGTTIOSVPIPGSEPREW 180  
Oy 342 GPQAGPPLSRTSQSYTCNOECNCLNATLSFNTILRLSGERVVYSYSAVVAHALHS 401  
Db 181 GPQAGPPLSRTSQSYTCNOECNCLNATLSFNTILRLSGERVVYSYSAVVAHALHS 240  
Oy 402 LIGCDKSTCTKRVVYPMQLLEIKVNFLLDHOIFPDPOGDVALHLEIVOMQDRSNP 461  
Db 241 LIGCDKSTCTKRVVYPMQLLEIKVNFLLDHOIFPDPOGDVALHLEIVOMQDRSNP 300  
Oy 462 FOSVASYRPLQROLKNIODISHTVNTTIPMSCKRQSGQKKKPVGIVHCCFECIDCL 521  
Db 301 FOSVASYRPLQROLKNIK-TSLHTVNTTIPMSCKRQSGQKKKPVGIVHCCFECIDCL 359  
Oy 522 PGTFLNTEDEYECACPNNEWSYQSESCFKRQLVLEHNEAPTIIVALLAALGFLSTL 581  
Db 360 PGTFLNTEDEYECACPNNEWSYQSESCFKRQLVLEHNEAPTIIVALLAALGFLSTL 412  
Oy 582 AILVIFMRHFOPTIVRSAGGPMCFMLTLLVAVVVVPVYVGPVKVSTCLCROALPPLCF 641  
Db 413 AILVIFMRHFOPTIVRSAGGPMCFMLTLLVAVVVVPVYVGPVKVSTCLCROALPPLCF 472

Oy 642 TICISCIASVFOIVCAFKMASRPPRAYSYWRYOGFVSMAPITVLKMWIIVIGMLARP 701  
Db 473 TICISCIASVFOIVCAFKMASRPPRAYSYWRYOGFVSMAPITVLKMWIIVIGMLARP 532  
Oy 702 QSHRTPDDPKITIVSCNPNRYNSLLFNSTLDSLVGFSFAYMKELEPTYNNEAKFI 761  
Db 533 QSHRTPDDPKITIVSCNPNRYNSLLFNSTLDSLVGFSFAYMKELEPTYNNEAKFI 592  
Oy 762 TLSMTFFYTSVSLCTFMSASVGLVTVLLVTLNLALISLQYFGPKCYMILFYPERN 821  
Db 593 TLSMTFFYTSVSLCTFMSASVGLVTVLLVTLNLALISLQYFGPKCYMILFYPERN 652  
Oy 822 TPAYNSMIOGYTMRD 838  
Db 653 TPAYNSMIOGYTMRD 669

## RESULT 9

US-10-225-567A-683  
; Sequence 683, Application US/10225567A  
; Publication No. US20030113798A1  
; GENERAL INFORMATION:  
; APPLICANT: Lifespan Biociences  
; APPLICANT: Brown, Joseph P.  
; APPLICANT: Burmer, Glenn C.  
; APPLICANT: Roush, Christine L.  
; TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS  
; FILE REFERENCE: 1920-4-4  
; CURRENT APPLICATION NUMBER: US/10/225,567A  
; PRIOR FILING DATE: 2001-12-19  
; PRIOR APPLICATION NUMBER: 60/257,144  
; PRIOR FILING DATE: 2000-12-19  
; NUMBER OF SEQ ID NOS: 2292  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 683  
; LENGTH: 669  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; US-10-225-567A-683

Query Match 79.1%; Score 3514; DB 14; Length 669;  
Best Local Similarity 98.4%; Pred. No. 0;  
Matches 666; Conservative 1; Mismatches 2; Indels 8; Gaps 2;

Oy 162 ITTSAISDELDRKVRFPALRTTPSADHVEAMVOLMHPFNMWIIYLVSSDTYGRDNGQ 221  
Db 1 ITTSAISDELDRKVRFPALRTTPSADHVEAMVOLMHPFNMWIIYLVSSDTYGRDNGQ 60  
Oy 222 LIGERVARRDICIAFOETLPTLOPNOMTSEERQRLVTIVDKLOOSTARVVVFPDLTL 281  
Db 61 LIGERVARRDICIAFOETLPTLOPNOMTSEERQRLVTIVDKLOOSTARVVVFPDLTL 120  
Oy 282 YHFEVEVLKQNFCAVMIASBSMAIDPVLNLTGLHGTFLGTTIOSVPIPGSEPREW 341  
Db 121 YHFEVEVLKQNFCAVMIASBSMAIDPVLNLTGLHGTFLGTTIOSVPIPGSEPREW 180  
Oy 342 GPQAGPPLSRTSQSYTCNOECNCLNATLSFNTILRLSGERVVYSYSAVVAHALHS 401  
Db 181 GPQAGPPLSRTSQSYTCNOECNCLNATLSFNTILRLSGERVVYSYSAVVAHALHS 240  
Oy 402 LIGCDKSTCTKRVVYPMQLLEIKVNFLLDHOIFPDPOGDVALHLEIVOMQDRSNP 461  
Db 241 LIGCDKSTCTKRVVYPMQLLEIKVNFLLDHOIFPDPOGDVALHLEIVOMQDRSNP 300  
Oy 462 FOSVASYRPLQROLKNIODISHTVNTTIPMSCKRQSGQKKKPVGIVHCCFECIDCL 521  
Db 301 FOSVASYRPLQROLKNIK-TSLHTVNTTIPMSCKRQSGQKKKPVGIVHCCFECIDCL 359  
Oy 522 PGTFLNTEDEYECACPNNEWSYQSESCFKRQLVLEHNEAPTIIVALLAALGFLSTL 581  
Db 360 PGTFLNTEDEYECACPNNEWSYQSESCFKRQLVLEHNEAPTIIVALLAALGFLSTL 412  
Oy 582 AILVIFMRHFOPTIVRSAGGPMCFMLTLLVAVVVVPVYVGPVKVSTCLCROALPPLCF 641

```

Db      413  |||||ALIVFMHFRPTVIRSRAGPMCFMLTLTLVAWVVPVYGPBPKSTCLGQALPCLCF 472
Qy      642  |||||TICICICIAVRSFOIYICAFPMASRFPRAVSYWRYGQPIYSMAFITLKVIVVIGMLARP 701
Db      473  |||||TICICIAVRSFOIYICAFPMASRFPRAVSYWRYGQPIYSMAFITLKVIVVIGMLARP 532
Qy      702  |||||OSHPRTDPPDKITTVSCNPNRNSLLFNTSLDLLSVVGFSPFAVMGKELPTNNEAKPI 761
Db      533  |||||OSHPRTDPPDKITTVSCNPNRNSLLFNTSLDLLSVVGFSPFAVMGKELPTNNEAKPI 592
Qy      762  |||||TLSMTFFYTSVSLCTFMSAGSVLVTIVDLLVTLNLALSLGYFGPKCYMILFYPERN 821
Db      593  |||||TLSMTFFYTSVSLCTFMSAGSVLVTIVDLLVTLNLALSLGYFGPKCYMILFYPERN 652
Qy      822  |||||TPAYNSMTQGYTMRD 838
Db      653  |||||TPAYNSMTQGYTMRD 669

```

## RESULT 10

```

US-09-927-315-7
; Sequence 7, Application US/09927315
; Publication No. US20030040045A1
; GENERAL INFORMATION:
; APPLICANT: Zuker, Charles S.
; APPLICANT: Ryba, Nicholas J.P.
; APPLICANT: Nelson, Greg
; APPLICANT: Hoon, Mark A.
; APPLICANT: Chandrasekar, Jayaram
; APPLICANT: Zhang, Yifeng
; APPLICANT: The Regents of the University of California
; APPLICANT: The Government of the United States of America
; APPLICANT: as represented by the Secretary of the
; TITLE OF INVENTION: Mammalian Sweet Taste Receptors
; FILE REFERENCE: 02307E-120110US
; CURRENT APPLICATION NUMBER: US/09/927,315
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: US 60/302,898
; PRIOR FILING DATE: 2001-07-03
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 843
; TYPE: PRT
; ORGANISM: Rattus sp.
; FEATURE:
; OTHER INFORMATION: rat T1R2 sweet taste receptor
US-09-927-315-7

```

```

Query Match      72.1%; Score 3203.5; DB 10; Length 843;
Best Local Similarity 70.6%; Pred. No. 1.1e-293;
Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

Qy      1  |||||MEPRAKTICSLFLLMLVAEP--AENSDFYLPQYLLGLGSLSHANMGIVHNLQVP 57
Db      1  |||||MEPRARTICLLSLHLVLPKPKGLVENSDFHLGADVLGLGFTLHANVKSISHLSTLYP 60
Qy      58  |||||MCKEVEKVIYNLMQAMFAVEEINNDGSLPGVLLGYEIVDVCYSNNQVPVLYFLAH 117
Db      61  |||||KNEFTMKVLSTNLMQAMFAVEEINNCSSLPGLVLLGEMVDVCLSNHNGLYFLAQ 120
Qy      118  |||||EDNLLPIQEDSYNYSRVAIVGPDNSSESVMTVAFLSLPQLITYSALISDELADKYF 177
Db      121  |||||DDDLPIILKDYQYMPHVAVVIGPDNSSESAITVSNLSHFLIPQITYSALISDKLDRKF 180
Qy      178  |||||PALLTTPSADHVEAMVOLMLHFRNMWIVVSSPTVGRDQGLLGEVAV-RDICTAF 236
Db      181  |||||PSMLKRVPSATHIEMVQMLVHFMNMWIVLVSDDDYERENSHLSQRLTKTSDICAF 240
Qy      237  |||||QETLPLQPNQWMTSEERQRLVTVIKLQOSTARVVVVSPDLTYHFNEVLRQFTGA 296

```

```

Db      241  |||||QEVLPRESSQVMSSEBQRLNIDLKLRTSARVVVVFSEBELSLYSEFHEVLRNNTGF 300
Qy      297  |||||VWISSESAIDPVLANLTGLHGLGFLGITQSVPIPEGSFEREMGPAGPPLSRTSQS 356
Db      301  |||||VWISSESAIDPVLANLTGLHGLGFLGITQSVPIPEGSFEREMGPAGPPLSR 360
Qy      357  |||||YTCNQCNCNLANLTFNTIILRSGERVVSYSVAVVAALHSLGCDSTCKRVVY 416
Db      361  |||||TTCNDQCAQNTTSSFNIIILISGERVVSYSVAVVAALHSLGCDSTCKRVVY 420
Qy      417  |||||PMOLLEIWKVNFLLDHOIFPDPOGDVALHLEIVQWQMSQNPQSVASYPLQROUK 476
Db      421  |||||PMOLLEIWKVNFLLDHOIFPDPOGDVALHLEIVQWQMSQNPQSVASYPLQROUK 480
Qy      477  |||||NIQDISMTVNNTLPMSCSKRCOSGQKKRVGIVHCCFECIDCLPGFELHTEDEYEQ 536
Db      481  |||||YINNVSWTYPNNVTVSVMSCKSCQPGQKKSVGLHPCCECLDCMPGYTLNRSADENCL 540
Qy      537  |||||ACPNNEMSGQSESCFKQLVLEWHEAPTIJAVALLALGFLSTLAILVIFMRHFPQPIV 596
Db      541  |||||SCPGSMYSKNDITCFQRPFTFLEWHEAPTIJAVALLALGFLSTLAILVIFMRHFPQPIV 600
Qy      597  |||||RSAGGPMCFMLTLTLVAWVVPVYGPBPKSTCLGQALPCLCTICICIAVRSFOIV 656
Db      601  |||||RSAGGPMCFMLTLTLVAWVVPVYGPBPKSTCLGQALPCLCTICICIAVRSFOIV 660
Qy      657  |||||CAFPMASRFPRAVSYWRYGQPIYSMAFITLKVIVVIGMLARPQSHP--RTDPPDKI 714
Db      661  |||||CVFKARLPSAYSSWMMYHGPVFAVITIKVALVGNMLA-TTINPIGITDPPDKI 719
Qy      715  |||||TIVSCPNYRNSLLFNTSLDLLSVVGFSPFAVMGKELPTNNEAKFITLSMTFFYTSVS 774
Db      720  |||||MILSCHPRYRGILFNTSMDDLSTVGFSPFAVMGKELPTNNEAKFITLSMTFFYTSVS 779
Qy      775  |||||LCTFMSAGSVLVTIVDLLVTLNLALSLGYFGPKCYMILFYPERNTPAYNSMTQGYT 834
Db      780  |||||LCTFMSAGSVLVTIVDLLVTLNLALSLGYFGPKCYMILFYPERNTPAYNSMTQGYT 839
Qy      835  |||||MRK 837
Db      840  |||||MRK 842

```

## RESULT 11

```

US-10-124-598-1
; Sequence 1, Application US/10124598
; Publication No. US20020119526A1
; GENERAL INFORMATION:
; APPLICANT: Zuker, Charles S.
; APPLICANT: Adler, Jon Elliot
; APPLICANT: Lindemeier, Uergeren
; APPLICANT: The Regents of the University of California
; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor
; FILE REFERENCE: 02307E-088720US
; CURRENT APPLICATION NUMBER: US/10/124,598
; CURRENT FILING DATE: 2002-04-16
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/361,631
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-07-27
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/112,747
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-17
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 843
; TYPE: PRT
; ORGANISM: Rattus sp.
; FEATURE:
; OTHER INFORMATION: rat G-protein coupled receptor (GPCR) B4 amino
; OTHER INFORMATION: acid sequence
US-10-124-598-1

```

```

Query Match      72.1%; Score 3203.5; DB 13; Length 843;

```

Best Local Similarity 70.6%; Pred. No. 1,1e-293;  
Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

```
QY 1 MGPRAKTICSLFFLLMVALEP---AENSDFYLPQDYLLGGLFSLAHNMKGIVHLNPLQVP 57
DB 1 MOPARTICLSLHLHLPRPKGLVENSDFHLAGDYLGLFTLHAANKVISHLSYLOVP 60
QY 58 MCKEYEVKIVGYNLQMAMRAVEBEINNDSSLLPGVLLGEIVDVCYSNNVOPVLYFLAH 117
DB 61 KCNEFTMKVGLGYNLQMAMRAVEBEINNDSSLLPGVLLGEIVDVCYSNNVOPVLYFLAH 120
QY 118 EDNLPIQEDYSNYSRVAVAVIGPNSESVMYANFLSLFLLPQITYSALSDLRDQKRF 177
DB 121 DDDLPLPKDYSQYMPHVAVAVIGPNSESALTIVSNILSHFLPQITYSALSDLRDQKRF 180
QY 178 PALRTTPSADHHEAVAMQMLHFRMNMIVLVSSDTPYGRDQGLGERVAR-RDICIATF 236
DB 181 PSMKRTVSATHTHEAMQMLHFRMNMIVLVSSDTPYGRDQGLGERVAR-RDICIATF 240
QY 237 QETLFTLPQNMNTSEERQRLVTIVDKLQOSTARVVVSPDLTLVHFENEVLARONFTGA 296
DB 241 QEVLPPIESSQVWRSEERQRLDNLIDKLRTSARVVVSPDLTLVHFENEVLARONFTGA 300
QY 297 VMAESMAIDPVHLNLTHTLRTGTFLGVTIQRVSIPEGSOFRVRDRKPGVPVPTTNLR 360
DB 301 VMAESMAIDPVHLNLTHTLRTGTFLGVTIQRVSIPEGSOFRVRDRKPGVPVPTTNLR 360
QY 357 YTCNOECNCLNATLSFNTILRLSGERVVSVYSAVVAHAHLSLGCSTCKRVV 416
DB 361 TTCNQDCCALNTTSFNNILLSGERVVSVYSAVVAHAHLSLGCNRCVCTKQVY 420
QY 417 PMOLLEIWKVNFLLDHOIFPDQGVALLHLEIVQWQMSQNPQSVASYPLQRLQK 476
DB 421 PMOLLEIWKVNFLLDHOIFPDQGVALLHLEIVQWQMSQNPQSVASYPLQRLQK 480
QY 477 NIQDISHTVNTTIPMSCKSCQSGOKKPYGIVHCCCECDLCPGLFNLHTEBEYEQ 536
DB 481 YINNVSMTVNTTIPMSCKSCQSGOKKPYGIVHCCCECDLCPGLFNLHTEBEYEQ 540
QY 537 ACPNNEWSYQSETSCEFQRLVLEHWEAPTIYVALLAALGFLSTALIVIFMRHPOTPIV 596
DB 541 SCPSGMSYKNDITCFQRAPFTLEHWEAPTIYVALLAALGFLSTALIVIFMRHPOTPIV 600
QY 597 RSAGGPMCFMLTLLLVAVYVVPVYVGPVKVSTCLCRQALPFLCFTICISCIARVSQIV 656
DB 601 RSAGGPMCFMLTLLLVAVYVVPVYVGPVKVSTCLCRQALPFLCFTICISCIARVSQIV 660
QY 657 CAFKMASRFPRAYSYWRVYQGPVYSMAFTVLKXIVYVIGMLARQSHR--RTDPDDPKI 714
DB 661 CAFKMASRFPRAYSYWRVYQGPVYSMAFTVLKXIVYVIGMLARQSHR--RTDPDDPKI 719
QY 715 TIVSCNPYRNSLFPNTSLDILLVSGFSFAYMGEKELPTNVEAKFTLSTMTFTYSVS 774
DB 720 MILSCHPRYRNGLFPNTSMILLVSGFSFAYMGEKELPTNVEAKFTLSTMTFTYSVS 779
QY 775 LCTFMSAVSGLVLTIVDILLVTVLNLALISLGYFGKCYMILFEYPERANTPAYFNSMIQGYT 834
DB 780 LCTFMSAVSGLVLTIVDILLVTVLNLALISLGYFGKCYMILFEYPERANTPAYFNSMIQGYT 839
QY 835 MRK 837
DB 840 MRK 842
```

RESULT 12  
US-10-096-144-1

; Sequence 1, Application US/10096144  
; Publication No. US20030022288A1  
; GENERAL INFORMATION:  
; APPLICANT: Zuker, Charles S.  
; APPLICANT: Adler, Jon Elliot  
; APPLICANT: Lindemeyer, Jürgen  
; APPLICANT: The Regents of the University of California

; TITLE OF INVENTION: Nucleic Acids Encoding a G-Protein Coupled Receptor  
; FILE REFERENCE: Involved in Sensory Transduction  
; CURRENT APPLICATION NUMBER: US/10/096,144  
; PRIOR FILING DATE: 2002-03-08  
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/361,631  
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-07-27  
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/095,464  
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-07-28  
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/112,747  
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-17  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: Patent Ver. 2.0  
; SEQ ID NO 1  
; LENGTH: 843  
; TYPE: PR  
; ORGANISM: Rattus sp.  
; FEATURE:  
; OTHER INFORMATION: rat G-protein coupled receptor (GPCR) B4 amino  
; OTHER INFORMATION: acid sequence  
US-10-096-144-1

Query Match 72.1%; Score 3203.5; DB 14; Length 843;

Best Local Similarity 70.6%; Pred. No. 1,1e-293;  
Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

```
QY 1 MGPRAKTICSLFFLLMVALEP---AENSDFYLPQDYLLGGLFSLAHNMKGIVHLNPLQVP 57
DB 1 MOPARTICLSLHLHLPRPKGLVENSDFHLAGDYLGLFTLHAANKVISHLSYLOVP 60
QY 58 MCKEYEVKIVGYNLQMAMRAVEBEINNDSSLLPGVLLGEIVDVCYSNNVOPVLYFLAH 117
DB 61 KCNEFTMKVGLGYNLQMAMRAVEBEINNDSSLLPGVLLGEIVDVCYSNNVOPVLYFLAH 120
QY 118 EDNLPIQEDYSNYSRVAVAVIGPNSESVMYANFLSLFLLPQITYSALSDLRDQKRF 177
DB 121 DDDLPLPKDYSQYMPHVAVAVIGPNSESALTIVSNILSHFLPQITYSALSDLRDQKRF 180
QY 178 PALRTTPSADHHEAVAMQMLHFRMNMIVLVSSDTPYGRDQGLGERVAR-RDICIATF 236
DB 181 PSMKRTVSATHTHEAMQMLHFRMNMIVLVSSDTPYGRDQGLGERVAR-RDICIATF 240
QY 237 QETLFTLPQNMNTSEERQRLVTIVDKLQOSTARVVVSPDLTLVHFENEVLARONFTGA 296
DB 241 QEVLPPIESSQVWRSEERQRLDNLIDKLRTSARVVVSPDLTLVHFENEVLARONFTGA 300
QY 297 VMAESMAIDPVHLNLTHTLRTGTFLGVTIQRVSIPEGSOFRVRDRKPGVPVPTTNLR 360
DB 301 VMAESMAIDPVHLNLTHTLRTGTFLGVTIQRVSIPEGSOFRVRDRKPGVPVPTTNLR 360
QY 357 YTCNOECNCLNATLSFNTILRLSGERVVSVYSAVVAHAHLSLGCSTCKRVV 416
DB 361 TTCNQDCCALNTTSFNNILLSGERVVSVYSAVVAHAHLSLGCNRCVCTKQVY 420
QY 417 PMOLLEIWKVNFLLDHOIFPDQGVALLHLEIVQWQMSQNPQSVASYPLQRLQK 476
DB 421 PMOLLEIWKVNFLLDHOIFPDQGVALLHLEIVQWQMSQNPQSVASYPLQRLQK 480
QY 477 NIQDISHTVNTTIPMSCKSCQSGOKKPYGIVHCCCECDLCPGLFNLHTEBEYEQ 536
DB 481 YINNVSMTVNTTIPMSCKSCQSGOKKPYGIVHCCCECDLCPGLFNLHTEBEYEQ 540
QY 537 ACPNNEWSYQSETSCEFQRLVLEHWEAPTIYVALLAALGFLSTALIVIFMRHPOTPIV 596
DB 541 SCPSGMSYKNDITCFQRAPFTLEHWEAPTIYVALLAALGFLSTALIVIFMRHPOTPIV 600
QY 597 RSAGGPMCFMLTLLLVAVYVVPVYVGPVKVSTCLCRQALPFLCFTICISCIARVSQIV 656
DB 601 RSAGGPMCFMLTLLLVAVYVVPVYVGPVKVSTCLCRQALPFLCFTICISCIARVSQIV 660
QY 657 CAFKMASRFPRAYSYWRVYQGPVYSMAFTVLKXIVYVIGMLARQSHR--RTDPDDPKI 714
DB 661 CAFKMASRFPRAYSYWRVYQGPVYSMAFTVLKXIVYVIGMLARQSHR--RTDPDDPKI 719
```

```

Qy 715 TVSCNPNRNSLLENTSDDLSTVYGFSPAYWKELEPTNYNEAKFTLSMTFFTSYS 774
Db 720 MLSCHPNRNGLPNTSMDLLSVGFSPAYWKELEPTNYNEAKFTLSMTFFTSIS 779
Qy 775 LCTFMSAYSGVLVTIVDLLVTYVNLALISLGFPGKCYMILFPERNTPAYFNSMIQYT 834
Db 780 LCTFMSVHDGVLVTIMDLLVTYVNLALISLGFPGKCYMILFPERNTPAYFNSMIQYT 839
Qy 835 MRR 837
Db 840 MRR 842

RESULT 13
US-10-246-785-6
; Sequence 6, Application US/10246785
; Publication No. US20030148448A1
; GENERAL INFORMATION:
; APPLICANT: IRM, LLC
; APPLICANT: The Scripps Research Institute
; APPLICANT: Liao, Jiayu
; APPLICANT: Sheng, Ding
; APPLICANT: Schultz, Peter G
; TITLE OF INVENTION: Sweet Taste Receptors
; FILE REFERENCE: 36-002810US/PC
; CURRENT APPLICATION NUMBER: US/10/246,785
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/323,450
; PRIOR FILING DATE: 2001-09-18
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 843
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-10-246-785-6

Query Match 72.1%; Score 3203.5; DB 14; Length 843;
Best Local Similarity 70.6%; Pred. No. 1.1e-293;
Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

Qy 1 MGPRAKTCISLFFLLMVLAE---AENSDFYLPGLDYLGLGFSLHNMKGIVHLNFIQVP 57
Db 1 MGPRAKTCISLFFLLMVLAE---AENSDFYLPGLDYLGLGFSLHNMKGIVHLNFIQVP 60
Qy 58 MCKEYEVKVIYNLMQAMRFAVEEINNDSSLLPGVLLGVEIDVVCYISNNVQPVLYFLAH 117
Db 61 KCNEFTMKVLYGNLMQAMRFAVEEINNDSSLLPGVLLGVEIDVVCYISNNVQPVLYFLAH 120
Qy 118 ENNLPIODDYSNYSRVAVIGPDNSSEVMYVAFNLFLPQITYSASIDELDKVRF 177
Db 121 DDDLPIELDYDQYMHVAVIGPDNSSESAITVSNLSHFLIPQITYSASIDELDKVRF 180
Qy 178 PALRTTPSADHVEAMVOLMLFRMWTIIVYSSPTGRDNGQLGSEVAR-RDICIAP 236
Db 181 PSMKRTVPATHTHEAMVOLMLFRMWTIIVYSSPTGRDNGQLGSEVAR-RDICIAP 240
Qy 237 QETLPTLOQNMNTSEERQLVTIVDKLQOSTARVVVSPDLTYHFNVEYLRONFQA 296
Db 241 QEVLPPIESSQYMRSEQRQDNIIDKLARTSARVVVSPDLTYHFNVEYLRONFQA 300
Qy 297 VVIASESAIDPVYVNLHVLGTLGTLITIGSVPIPGSSERFEMQPGAPPLSRTSOS 356
Db 301 VVIASESAIDPVYVNLHVLGTLGTLITIGSVPIPGSSERFEMQPGAPPLSRTSOS 360
Qy 357 YTCNOCBDCNLNATLSFNTILRSGERVYVYSAVYAAHLLSHLGGDKSTCRVYV 416
Db 361 TTCNOCBDCNLNATLSFNTILRSGERVYVYSAVYAAHLLSHLGGDKSTCRVYV 420
Qy 417 PMQLLEIKVNFLLIDHQIFDPDQGVALHLEIVQMQRSDQNPQSVASYVPIQROUK 476
Db 421 PMQLLEIKVNFLLIDHQIFDPDQGVALHLEIVQMQRSDQNPQSVASYVPIQROUK 480

```

```

Qy 477 NIODISMHTVNTTIPMSKSKRCOSGOKKPKVGIHVCCPECIDCLPGFELNTEDEYECO 536
Db 481 YINNVSWTPNTNTVSVNSKSCSCOPGMKKSGLHPCCECEIDCMPTGLNLSABEFNCL 540
Qy 537 ACPNNEWSYOSSETSCFKQLVLEWHAPJIAVALLAALGFLSTALIVIFRHRFOTPIV 596
Db 541 SCFGSMWSYKNDITCFORRPFLEWHEVPTIIVALLAALGFSTALIVIFRHRFOTPMV 600
Qy 597 RSAGPMCFMLTLLVAVMYVYVGPVKSTICLRQALPFLCTTICISCLAVNSFOIV 656
Db 601 RSAGPMCFMLTLLVAVMYVYVGPVKSTICLRQALPFLCTTICISCLAVNSFOIV 660
Qy 657 CAFKASRPPRAYSYVYVYVGPVMAFTVYVIGMAVYVIGMAVYVIGMAVYVIGMAVYV 714
Db 661 CVFKARRLPSAYSYVYVYVGPVMAFTVYVIGMAVYVIGMAVYVIGMAVYVIGMAVYV 719
Qy 715 TVSCNPNRNSLLENTSDDLSTVYGFSPAYWKELEPTNYNEAKFTLSMTFFTSYS 774
Db 720 MLSCHPNRNGLPNTSMDLLSVGFSPAYWKELEPTNYNEAKFTLSMTFFTSIS 779
Qy 775 LCTFMSAYSGVLVTIVDLLVTYVNLALISLGFPGKCYMILFPERNTPAYFNSMIQYT 834
Db 780 LCTFMSVHDGVLVTIMDLLVTYVNLALISLGFPGKCYMILFPERNTPAYFNSMIQYT 839
Qy 835 MRR 837
Db 840 MRR 842

RESULT 14
US-10-190-417-7
; Sequence 7, Application US/10190417
; Publication No. US20030166137A1
; GENERAL INFORMATION:
; APPLICANT: Zuker, Charles S.
; APPLICANT: Ryba, Nicholas J. P.
; APPLICANT: Chandrasekar, Jayaram
; APPLICANT: Hoon, Mark A.
; APPLICANT: Nelson, Greg
; APPLICANT: Zhang, Yifeng
; APPLICANT: The Regents of the University of California
; APPLICANT: The Government of the United States of America
; APPLICANT: as represented by the Secretary of the
; Department of Health and Human Services
; TITLE OF INVENTION: Mammalian Sweet and Amino Acid Heterodimeric Taste
; FILE REFERENCE: 02307E-120130US
; CURRENT APPLICATION NUMBER: US/10/190,417
; CURRENT FILING DATE: 2002-11-14
; PRIOR APPLICATION NUMBER: US 60/302,898
; PRIOR FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 09/927,315
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: US 60/358,925
; PRIOR FILING DATE: 2002-02-22
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 843
; TYPE: PRT
; ORGANISM: Rattus norvegicus
; FEATURES:
; OTHER INFORMATION: rat TIR2
US-10-190-417-7

Query Match 72.1%; Score 3203.5; DB 14; Length 843;
Best Local Similarity 70.6%; Pred. No. 1.1e-293;
Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

Qy 1 MGPRAKTCISLFFLLMVLAE---AENSDFYLPGLDYLGLGFSLHNMKGIVHLNFIQVP 57
Db 1 MGPRAKTCISLFFLLMVLAE---AENSDFYLPGLDYLGLGFSLHNMKGIVHLNFIQVP 60

```

```

QY 58 MCKEYEVKVGYNLMQAMRFAVEEINNDSLLPGVLLGEYVDCYISNNVOPVLYFLAH 117
DB 61 KCNEBTMVLGVNLMQAMRFAVEEINNDSLLPGVLLGEYVDCYISNNVOPVLYFLAH 120
QY 118 EDNLLPIQEDBSYNTSRVAVAVIGPNSSEVMTVANFSLFLPQITYSASIDELDKYRF 177
DB 121 DDDLPLIKDYSQYMPHVAVIGPNSSEVMTVANFSLFLPQITYSASIDELDKYRF 180
QY 178 PALRTTSDADHVEAVQMLHFRMNNITIVVSSDTPGRDNGLLGSRVAR-RDICTAF 236
DB 181 PSMLTRVSAATHIEAMQVHFGQNMIVLVSDDDYGRSHLSQRLTSDICTAF 240
QY 237 QETLPTLOPNQNMTESEORQRLVTVKLOQSTARVVVSPDLTYHFENEYLRQNTGCA 296
DB 241 QEVLPIRESSQVMRSEBQRLDNIDKLRRTSARVVVSPDLTYHFENEYLRQNTGCA 300
QY 297 VWIASEVAIDPVLANLTGLHGTFLGTTTQSVPIPGSEPREMGPOAGPPLSRTSQS 356
DB 301 VWIASEVAIDPVLANLTGLHGTFLGTTTQSVPIPGSEPREMGPOAGPPLSRTSQS 360
QY 357 YTCNOECNCLNATLSPNTILRLSGERVVSVYSAVVAHALLHSLGCDSTCKRVY 416
DB 361 TTCNODCACLNTYTSFNNILRLSGERVVSVYSAVVAHALLHSLGCDSTCKRVY 420
QY 417 PMQLLEIWKVNFLLDHOIFPDQGVVALHLEIVQOMQDSQNPFGQSVASYPLQRLK 476
DB 421 PMQLLEIWKVNFLLDHOIFPDQGVVALHLEIVQOMQDSQNPFGQSVASYPLQRLK 480
QY 477 NIODISWHTVNTTIPMSKSCRCQSGQKKPVGIVHVCCECTDCLPGFLNHTEDYEQ 536
DB 481 YINNVSWYTPNNVTPVSMCKSCQPGQMKSVGLHPCCECTDCLPGFLNHTEDYEQ 540
QY 537 ACPNNEWSYQSETSQCFKQOLVFLMEHAPTAVALAALGFLSTALIVFMRHQTPIV 596
DB 541 SCPSGMSYKNDITCFQRPTFLMEHAPTAVALAALGFLSTALIVFMRHQTPIV 600
QY 597 RSAGGPMCFMLTLVLAVMVVPVYVGPVKVSTCLCROALPPLCTICISCIARVFOIV 656
DB 601 RSAGGPMCFMLTLVLAVMVVPVYVGPVKVSTCLCROALPPLCTICISCIARVFOIV 660
QY 657 CAFKASFPAPAYSTWVRYQGPVYMATITVLAQVIVYIGMLARQSHR-RTDPDDPKI 714
DB 661 CVFKARLPAPAYSTWVRYQGPVYMATITVLAQVIVYIGMLARQSHR-RTDPDDPKI 719
QY 715 TIVSCNPNYRSLFNTSLDILLVSGFSPAMGKELPTNNEAKFILTSMTEYTSVS 774
DB 720 MILSCHPNYRSLFNTSLDILLVSGFSPAMGKELPTNNEAKFILTSMTEYTSVS 779
QY 775 LCTFMSAYSGVLTIVDLVTVLNLALASLGFQKCYMILFFPERANTPAYFNSMIOGYT 834
DB 780 LCTFMSAYSGVLTIVDLVTVLNLALASLGFQKCYMILFFPERANTPAYFNSMIOGYT 839
QY 835 MRR 837
DB 840 MRR 842

```

```

RESULT 15
US-10-179-373-17
; Sequence 17, Application US/10179373
; Publication No. US20030232407A1
; GENERAL INFORMATION:
; APPLICANT: ZOLLER, MARK
; APPLICANT: LI, XINADONG
; APPLICANT: STASZEWSKI, LENA
; APPLICANT: O'CONNELL, SHAWN
; APPLICANT: ZOZULYA, SERGEY
; APPLICANT: ADLER, JON
; APPLICANT: XU, HONG
; APPLICANT: ECHEVERRI, FERNANDO
; TITLE OF INVENTION: TIR HETERO-OLIGOMERIC TASTE RECEPTORS AND CELL LINES
; TITLE OF INVENTION: THAT EXPRESS SAID RECEPTORS AND USE THEREOF FOR

```

```

; TITLE OF INVENTION: IDENTIFICATION OF TASTE COMPOUNDS
; FILE REFERENCE: 078003-0291566
; CURRENT APPLICATION NUMBER: US/10/179,373
; CURRENT FILING DATE: 2002-06-26
; PRIOR APPLICATION NUMBER: 60/300,434
; PRIOR FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: 60/304,749
; PRIOR FILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: 60/310,493
; PRIOR FILING DATE: 2001-08-08
; PRIOR APPLICATION NUMBER: 60/331,771
; PRIOR FILING DATE: 2001-11-21
; PRIOR APPLICATION NUMBER: 60/339,472
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/372,090
; PRIOR FILING DATE: 2002-04-15
; PRIOR APPLICATION NUMBER: 60/374,143
; PRIOR FILING DATE: 2002-04-22
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 17
; LENGTH: 843
; TYPE: PRF
; ORGANISM: Rattus sp.
US-10-179-373-17

Query Match 72.1%; Score 3203.5; DB 15; Length 843;
Best Local Similarity 70.6%; Pred. No. 1.1e-293;
Matches 595; Conservative 108; Mismatches 133; Indels 7; Gaps 4;

QY 1 MGPRAKTCISLFLMLWYLAEB--AENSDFYLPQDYLGLGFLSHANKGIVHLNQLQVP 57
DB 1 MGPOARTCLLSLHLVLPKPGKLVENSDFHLADYLLGLFTLHANVKSISHLYLOVP 60
QY 58 MCKEYEVKVGYNLMQAMRFAVEEINNDSLLPGVLLGEYVDCYISNNVOPVLYFLAH 117
DB 61 KCNEBTMVLGVNLMQAMRFAVEEINNDSLLPGVLLGEYVDCYISNNVOPVLYFLAH 120
QY 118 EDNLLPIQEDBSYNTSRVAVAVIGPNSSEVMTVANFSLFLPQITYSASIDELDKYRF 177
DB 121 DDDLPLIKDYSQYMPHVAVIGPNSSEVMTVANFSLFLPQITYSASIDELDKYRF 180
QY 178 PALRTTSDADHVEAVQMLHFRMNNITIVVSSDTPGRDNGLLGSRVAR-RDICTAF 236
DB 181 PSMLTRVSAATHIEAMQVHFGQNMIVLVSDDDYGRSHLSQRLTSDICTAF 240
QY 237 QETLPTLOPNQNMTESEORQRLVTVKLOQSTARVVVSPDLTYHFENEYLRQNTGCA 296
DB 241 QEVLPIRESSQVMRSEBQRLDNIDKLRRTSARVVVSPDLTYHFENEYLRQNTGCA 300
QY 297 VWIASEVAIDPVLANLTGLHGTFLGTTTQSVPIPGSEPREMGPOAGPPLSRTSQS 356
DB 301 VWIASEVAIDPVLANLTGLHGTFLGTTTQSVPIPGSEPREMGPOAGPPLSRTSQS 360
QY 357 YTCNOECNCLNATLSPNTILRLSGERVVSVYSAVVAHALLHSLGCDSTCKRVY 416
DB 361 TTCNODCACLNTYTSFNNILRLSGERVVSVYSAVVAHALLHSLGCDSTCKRVY 420
QY 417 PMQLLEIWKVNFLLDHOIFPDQGVVALHLEIVQOMQDSQNPFGQSVASYPLQRLK 476
DB 421 PMQLLEIWKVNFLLDHOIFPDQGVVALHLEIVQOMQDSQNPFGQSVASYPLQRLK 480
QY 477 NIODISWHTVNTTIPMSKSCRCQSGQKKPVGIVHVCCECTDCLPGFLNHTEDYEQ 536
DB 481 YINNVSWYTPNNVTPVSMCKSCQPGQMKSVGLHPCCECTDCLPGFLNHTEDYEQ 540
QY 537 ACPNNEWSYQSETSQCFKQOLVFLMEHAPTAVALAALGFLSTALIVFMRHQTPIV 596
DB 541 SCPSGMSYKNDITCFQRPTFLMEHAPTAVALAALGFLSTALIVFMRHQTPIV 600
QY 597 RSAGGPMCFMLTLVLAVMVVPVYVGPVKVSTCLCROALPPLCTICISCIARVFOIV 656
DB 601 RSAGGPMCFMLTLVLAVMVVPVYVGPVKVSTCLCROALPPLCTICISCIARVFOIV 660

```

```
Qy 657 CAFKMASRPRAYSYWVRVYQGPVSMAFITVLKQWIVVIGMLARQSHP--RTDDDPKI 714
Db 661 CVFKMARRLPSAISTFMWRHGPYVFAFTAIKVALVGNMLA-TTINDIGRTDPDDPI 719
Qy 715 TIVSCNPNYRNSLIENTSLDILLVVGFSFAYMGKELPTNVEAKFITLSMTFYFTSSVS 774
Db 720 MISCHPYRNGLIENTSMDLLSVLGSFAYMGKELPTNVEAKFITLSMTFSFTSSIS 779
Qy 775 LCTFMSAYSGVLVTIVDLIVTLNLIAISLGYPGPKCYMILFYPERNTPAYFNSMIQGYT 834
Db 780 LCTFMSVHDGVLVTIMDLIVTLNLFALIGLGYGPKCYMILFYPERNTSAYFNSMIQGYT 839
Qy 835 MRR 837
Db 840 MKK 842
```

Search completed: May 11, 2004, 15:38:53  
Job time : 42.6604 secs

**THIS PAGE BLANK (USPTO)**

Wed May 12 10:42:53 2004

us-09-927-315-15.rapb

Page 1

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 11, 2004, 15:27:42 ; Search time 41.336 Seconds  
(without alignments)  
5720.583 Million cell updates/sec

Title: US-09-927-315-15

Perfect score: 4524

Sequence: 1 MLGPVILGLSLWALHPGTG.....GPGDAQGQNDNTGNQKHE 852

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1140673 seqs, 27756755 residues

Total number of hits satisfying chosen parameters: 1140673

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :

Published Applications AA:\*

```
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*
7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
10: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
11: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
13: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep:*
14: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep:*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	4524	100.0	852	9	US-09-897-427A-6
2	4524	100.0	852	14	US-09-927-315-15
3	4524	100.0	852	14	US-10-035-045-4
4	4524	100.0	852	14	US-10-190-417-15
5	4524	100.0	936	15	US-10-292-798-602
6	4517	99.8	852	12	US-10-188-186-148
7	4512	99.7	852	9	US-09-796-338A-14
8	4512	99.7	852	14	US-10-261-482-2
9	4512	99.7	852	14	US-10-283-837-14
10	4512	99.7	852	14	US-10-145-586-14
11	4512	99.7	852	15	US-10-407-079-90
12	4512	99.7	852	15	US-10-179-373-7
13	4509	99.7	852	16	US-10-280-183A-5
14	4500	99.5	850	10	US-09-799-629-4
15	4500	99.5	850	14	US-10-190-417-30

16	4496.5	99.4	863	15	US-10-436-715-2	Sequence 2, Appli
17	4490	99.2	850	14	US-10-246-785-7	Sequence 7, Appli
18	4474	98.9	894	15	US-10-436-715-6	Sequence 6, Appli
19	4461	98.6	854	14	US-10-159-339-2	Sequence 2, Appli
20	4461	98.6	854	15	US-10-436-715-86	Sequence 86, Appli
21	4365.5	96.5	829	15	US-10-436-715-4	Sequence 4, Appli
22	4142	91.6	1577	14	US-10-017-161-690	Sequence 690, App
23	4002	88.5	771	14	US-10-225-567A-593	Sequence 593, App
24	3708	82.0	855	16	US-10-297-021-1	Sequence 1, Appli
25	3255	71.9	858	10	US-09-799-629-14	Sequence 14, Appli
26	3255	71.9	858	10	US-09-927-315-25	Sequence 25, Appli
27	3255	71.9	858	14	US-10-035-045-14	Sequence 14, Appli
28	3255	71.9	858	14	US-10-246-785-9	Sequence 9, Appli
29	3255	71.9	858	14	US-10-190-417-25	Sequence 25, Appli
30	3255	71.9	858	15	US-10-179-373-3	Sequence 4, Appli
31	3229	71.4	858	10	US-09-927-315-23	Sequence 23, Appli
32	3229	71.4	858	14	US-10-246-785-8	Sequence 8, Appli
33	3229	71.4	858	14	US-10-190-417-23	Sequence 23, Appli
34	3229	71.4	858	16	US-10-280-183A-3	Sequence 3, Appli
35	3227.5	71.3	858	10	US-09-927-315-18	Sequence 18, Appli
36	3227.5	71.3	858	14	US-10-190-417-18	Sequence 18, Appli
37	3221.5	71.2	858	10	US-09-927-315-20	Sequence 20, Appli
38	3221.5	71.2	858	14	US-10-190-417-20	Sequence 20, Appli
39	3116	68.9	596	15	US-10-393-347-5	Sequence 5, Appli
40	1944	43.0	370	15	US-10-393-347-2	Sequence 2, Appli
41	1769	39.1	1138	14	US-10-261-482-4	Sequence 4, Appli
42	1208.5	26.7	840	10	US-09-361-652-1	Sequence 1, Appli
43	1208.5	26.7	840	10	US-09-927-315-1	Sequence 1, Appli
44	1208.5	26.7	840	14	US-10-246-785-3	Sequence 3, Appli
45	1208.5	26.7	840	14	US-10-190-417-1	Sequence 1, Appli

## ALIGNMENTS

```
RESULT 1
US-09-897-427A-6
; Sequence 6, Application US/09897427A
; Patent No. US2002016042A1
; GENERAL INFORMATION:
; APPLICANT: ADLER, JON ELLIOT
; APPLICANT: LI, XIADONG
; APPLICANT: STAZESKI, LEVA
; APPLICANT: XU, HONG
; APPLICANT: EHEVERRI, FERNANDO
; TITLE OF INVENTION: T1R HETERO-OLIGOMERIC TASTE RECEPTORS
; FILE REFERENCE: 078003-0282558
; CURRENT APPLICATION NUMBER: US/09/897,427A
; CURRENT FILING DATE: 2001-07-03
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 852
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-897-427A-6
```

Query Match 100.0%; Score 4524; DB 9; Length 852;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 852; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MLGPVILGLSLWALHPGTGAPLCLISQQLRMKGDYVGLGLPPLGAEAGLRSRTRPSSP	60
DB	1	MLGPVILGLSLWALHPGTGAPLCLISQQLRMKGDYVGLGLPPLGAEAGLRSRTRPSSP	60
QY	61	VCTRRSSNGLMALMKAAVEINNKSDLLGLRLGYDLPTCCSPVYAMKPSLMFLAKA	120
DB	61	VCTRRSSNGLMALMKAAVEINNKSDLLGLRLGYDLPTCCSPVYAMKPSLMFLAKA	120
QY	121	GSRDIAACNTYQOPRVLAIVIGPSSSLAVNTGKFFSFTLMPQVSYGASMEILLSARETF	180
DB	121	GSRDIAACNTYQOPRVLAIVIGPSSSLAVNTGKFFSFTLMPQVSYGASMEILLSARETF	180

```
OY 181 PSFRTVPSDRVQVLTAAAEELLQEFGMNVAALGSDDEYGRQGLSIFSAALAAARGICIAHE 240
DB 181 PSFRTVPSDRVQVLTAAAEELLQEFGMNVAALGSDDEYGRQGLSIFSAALAAARGICIAHE 240
OY 241 GLVPLPRADDSRLGKQVODVLAHOVNQSSVQVVLLEFASVAAHALFNYSISSRLSPKWWAS 300
DB 241 GLVPLPRADDSRLGKQVODVLAHOVNQSSVQVVLLEFASVAAHALFNYSISSRLSPKWWAS 300
OY 301 EAMLTSDLVNGLPMAQMGTVLGFLOQAQLHEFPQVYKTHALATDPAFCGALGEREOG 360
DB 301 EAMLTSDLVNGLPMAQMGTVLGFLOQAQLHEFPQVYKTHALATDPAFCGALGEREOG 360
OY 361 LEEDVVGQRCPQDCDITLQNVASAGLNHQTFSVYAAYVSAQALHNTLQCNASGCPADP 420
DB 361 LEEDVVGQRCPQDCDITLQNVASAGLNHQTFSVYAAYVSAQALHNTLQCNASGCPADP 420
OY 421 VKPQOLLENNYNTLFTHVGLPLRFDSSGNVDMEDLKLWMOGSVPRLDHVGRFNGSLRT 480
DB 421 VKPQOLLENNYNTLFTHVGLPLRFDSSGNVDMEDLKLWMOGSVPRLDHVGRFNGSLRT 480
OY 481 ERLKIRMTSDNQKPFVSRCSRCQCEGOVRRVKGPFHSCCYDCVCEAGSYRQNPDDIACTF 540
DB 481 ERLKIRMTSDNQKPFVSRCSRCQCEGOVRRVKGPFHSCCYDCVCEAGSYRQNPDDIACTF 540
OY 541 CGODEWSPERSTRCFRRRSRFLWAGEPAVLLLLLSLALGLVLAALGLFVHNRDSPLVQ 600
DB 541 CGODEWSPERSTRCFRRRSRFLWAGEPAVLLLLLSLALGLVLAALGLFVHNRDSPLVQ 600
OY 601 ASGGPLACFGVLCGLVCLSVLLFPQSPARCIAQOPLSHPLTGCLSTFLQAAEFV 660
DB 601 ASGGPLACFGVLCGLVCLSVLLFPQSPARCIAQOPLSHPLTGCLSTFLQAAEFV 660
OY 661 ESELPLSMADRLSGCLRGPMAMLVLLAMLVEVALCTWYLVAFPEVVTDMHMLPTETALV 720
DB 661 ESELPLSMADRLSGCLRGPMAMLVLLAMLVEVALCTWYLVAFPEVVTDMHMLPTETALV 720
OY 721 HCRTRSWVSFGLAHATNATLAFCLGTFPLVRSQPCYNRAGLTFAMLAFTTWVSFVP 780
DB 721 HCRTRSWVSFGLAHATNATLAFCLGTFPLVRSQPCYNRAGLTFAMLAFTTWVSFVP 780
OY 781 LLANQVVLPRPAVOMGALLCYLGILAAFLPRCTILMRQGLNTPBEFFLGSGPDADQO 840
DB 781 LLANQVVLPRPAVOMGALLCYLGILAAFLPRCTILMRQGLNTPBEFFLGSGPDADQO 840
OY 841 NDGNTNGQKHE 852
DB 841 NDGNTNGQKHE 852

RESULT 2
US-09-927-315-15
; Sequence 15, Application US/09927315
; Publication No. US20030040045A1
; GENERAL INFORMATION:
; APPLICANT: Zuker, Charles S.
; APPLICANT: Ryba, Nicholas J. P.
; APPLICANT: Nelson, Greg
; APPLICANT: Hoon, Mark A.
; APPLICANT: Chandrasekar, Jayaram
; APPLICANT: Zhang, Yifeng
; APPLICANT: The Regents of the University of California
; APPLICANT: as represented by the United States of America
; APPLICANT: Department of Health and Human Services
; TITLE OF INVENTION: Mammalian Sweet Taste Receptors
; FILE REFERENCE: 02307E-120110US
; CURRENT APPLICATION NUMBER: US/09/927,315
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: US 60/302,898
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
```

```
; LENGTH: 852
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: human T1R3 sweet taste receptor
US-09-927-315-15

Query Match 100.0%; Score 4524; DB 10; Length 852;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 852; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MLGPAVLGLSLMALHPGTGAPLCLSQQLRMKGDYVIGLPLRIGAEBAQIRSTRPSSP 60
DB 1 MLGPAVLGLSLMALHPGTGAPLCLSQQLRMKGDYVIGLPLRIGAEBAQIRSTRPSSP 60
OY 61 VCTRFSSNGLLMALAMKAVEEINNKSDLLPGLRLGYDLFDTCSEPVVANKPSLMFLAKA 120
DB 61 VCTRFSSNGLLMALAMKAVEEINNKSDLLPGLRLGYDLFDTCSEPVVANKPSLMFLAKA 120
OY 121 GSRDIAAYCNYTQYQPRVLAIVIGPHSSELMVNTGKFFSLMPQVSYGASMEELLSARETF 180
DB 121 GSRDIAAYCNYTQYQPRVLAIVIGPHSSELMVNTGKFFSLMPQVSYGASMEELLSARETF 180
OY 181 PSFRTVPSDRVQVLTAAAEELLQEFGMNVAALGSDDEYGRQGLSIFSAALAAARGICIAHE 240
DB 181 PSFRTVPSDRVQVLTAAAEELLQEFGMNVAALGSDDEYGRQGLSIFSAALAAARGICIAHE 240
OY 241 GLVPLPRADDSRLGKQVODVLAHOVNQSSVQVVLLEFASVAAHALFNYSISSRLSPKWWAS 300
DB 241 GLVPLPRADDSRLGKQVODVLAHOVNQSSVQVVLLEFASVAAHALFNYSISSRLSPKWWAS 300
OY 301 EAMLTSDLVNGLPMAQMGTVLGFLOQAQLHEFPQVYKTHALATDPAFCGALGEREOG 360
DB 301 EAMLTSDLVNGLPMAQMGTVLGFLOQAQLHEFPQVYKTHALATDPAFCGALGEREOG 360
OY 361 LEEDVVGQRCPQDCDITLQNVASAGLNHQTFSVYAAYVSAQALHNTLQCNASGCPADP 420
DB 361 LEEDVVGQRCPQDCDITLQNVASAGLNHQTFSVYAAYVSAQALHNTLQCNASGCPADP 420
OY 421 VKPQOLLENNYNTLFTHVGLPLRFDSSGNVDMEDLKLWMOGSVPRLDHVGRFNGSLRT 480
DB 421 VKPQOLLENNYNTLFTHVGLPLRFDSSGNVDMEDLKLWMOGSVPRLDHVGRFNGSLRT 480
OY 481 ERLKIRMTSDNQKPFVSRCSRCQCEGOVRRVKGPFHSCCYDCVCEAGSYRQNPDDIACTF 540
DB 481 ERLKIRMTSDNQKPFVSRCSRCQCEGOVRRVKGPFHSCCYDCVCEAGSYRQNPDDIACTF 540
OY 541 CGODEWSPERSTRCFRRRSRFLWAGEPAVLLLLLSLALGLVLAALGLFVHNRDSPLVQ 600
DB 541 CGODEWSPERSTRCFRRRSRFLWAGEPAVLLLLLSLALGLVLAALGLFVHNRDSPLVQ 600
OY 601 ASGGPLACFGVLCGLVCLSVLLFPQSPARCIAQOPLSHPLTGCLSTFLQAAEFV 660
DB 601 ASGGPLACFGVLCGLVCLSVLLFPQSPARCIAQOPLSHPLTGCLSTFLQAAEFV 660
OY 661 ESELPLSMADRLSGCLRGPMAMLVLLAMLVEVALCTWYLVAFPEVVTDMHMLPTETALV 720
DB 661 ESELPLSMADRLSGCLRGPMAMLVLLAMLVEVALCTWYLVAFPEVVTDMHMLPTETALV 720
OY 721 HCRTRSWVSFGLAHATNATLAFCLGTFPLVRSQPCYNRAGLTFAMLAFTTWVSFVP 780
DB 721 HCRTRSWVSFGLAHATNATLAFCLGTFPLVRSQPCYNRAGLTFAMLAFTTWVSFVP 780
OY 781 LLANQVVLPRPAVOMGALLCYLGILAAFLPRCTILMRQGLNTPBEFFLGSGPDADQO 840
DB 781 LLANQVVLPRPAVOMGALLCYLGILAAFLPRCTILMRQGLNTPBEFFLGSGPDADQO 840
OY 841 NDGNTNGQKHE 852
DB 841 NDGNTNGQKHE 852

RESULT 3
```

Wed May 12 10:42:53 2004

us-09-927-315-15.rapb

Page 3

```
US-10-035-045-4
; Sequence 4, Application US/10035045
; Publication No. US20030054448A1
; GENERAL INFORMATION:
; APPLICANT: ADLER, JON ELLIOT
; APPLICANT: LI, XIADONG
; APPLICANT: STASZEWSKI, LENA
; APPLICANT: O'CONNELL, SHAWN
; APPLICANT: ZOZULYA, SERGEY
; TITLE OF INVENTION: TIR TASTE RECEPTORS AND GENES ENCODING SAME
; FILE REFERENCE: 078003-0280681
; CURRENT APPLICATION NUMBER: US/10/035,045
; PRIOR FILING DATE: 2002-01-03
; PRIOR APPLICATION NUMBER: 60/259,227
; PRIOR FILING DATE: 2001-01-03
; PRIOR APPLICATION NUMBER: 60/284,547
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 852
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-035-045-4

Query Match      100.0%; Score 4524; DB 14; Length 852;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 852; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MCGPAVLGLSLWALLHPGTGAPLCISQQLRMKG DYVLGGLFPLGEAEAGLSRTRPSSP 60
DB      1 MCGPAVLGLSLWALLHPGTGAPLCISQQLRMKG DYVLGGLFPLGEAEAGLSRTRPSSP 60
QY      61 VCTRSSNGCLMALMKAAVEINNKSDLLPGLRGYDLFPTCSEPPVAMKSLMFLAKA 120
DB      61 VCTRSSNGCLMALMKAAVEINNKSDLLPGLRGYDLFPTCSEPPVAMKSLMFLAKA 120
QY      61 VCTRSSNGCLMALMKAAVEINNKSDLLPGLRGYDLFPTCSEPPVAMKSLMFLAKA 120
DB      61 VCTRSSNGCLMALMKAAVEINNKSDLLPGLRGYDLFPTCSEPPVAMKSLMFLAKA 120
QY      121 GSRDIAACNTYQYOPRVLAIVGPHSSSELAVYTGKFFSFLMPQVSYGASMEILSARETF 180
DB      121 GSRDIAACNTYQYOPRVLAIVGPHSSSELAVYTGKFFSFLMPQVSYGASMEILSARETF 180
QY      121 GSRDIAACNTYQYOPRVLAIVGPHSSSELAVYTGKFFSFLMPQVSYGASMEILSARETF 180
DB      121 GSRDIAACNTYQYOPRVLAIVGPHSSSELAVYTGKFFSFLMPQVSYGASMEILSARETF 180
QY      181 PSFRTVPSDRVQLTAAAEILLQEFGMNVAALGSDDEYGRQGLSIFSLAARAGICIAHE 240
DB      181 PSFRTVPSDRVQLTAAAEILLQEFGMNVAALGSDDEYGRQGLSIFSLAARAGICIAHE 240
QY      181 PSFRTVPSDRVQLTAAAEILLQEFGMNVAALGSDDEYGRQGLSIFSLAARAGICIAHE 240
DB      181 PSFRTVPSDRVQLTAAAEILLQEFGMNVAALGSDDEYGRQGLSIFSLAARAGICIAHE 240
QY      241 GLVPLPRADDSRLGKYQDYVLHQNQSSVQVLLFASVHAHALFNYSISSRLSPRYWAS 300
DB      241 GLVPLPRADDSRLGKYQDYVLHQNQSSVQVLLFASVHAHALFNYSISSRLSPRYWAS 300
QY      301 EAMLTSDILVMGLPGMAQKGTIVGLORGAQLHEFPQYVYKTHALATDPAFCALGERREG 360
DB      301 EAMLTSDILVMGLPGMAQKGTIVGLORGAQLHEFPQYVYKTHALATDPAFCALGERREG 360
QY      301 EAMLTSDILVMGLPGMAQKGTIVGLORGAQLHEFPQYVYKTHALATDPAFCALGERREG 360
DB      301 EAMLTSDILVMGLPGMAQKGTIVGLORGAQLHEFPQYVYKTHALATDPAFCALGERREG 360
QY      361 LEEDVVGRCPCQDCITLQNVASAGLNHQTFSVVAAYTSAQALNHTLQCNASGCPADDP 420
DB      361 LEEDVVGRCPCQDCITLQNVASAGLNHQTFSVVAAYTSAQALNHTLQCNASGCPADDP 420
QY      361 LEEDVVGRCPCQDCITLQNVASAGLNHQTFSVVAAYTSAQALNHTLQCNASGCPADDP 420
DB      361 LEEDVVGRCPCQDCITLQNVASAGLNHQTFSVVAAYTSAQALNHTLQCNASGCPADDP 420
QY      421 VKPMOLLENNYVLTTHVGGPLRFPDSSGNVDMEDYDKLWVQGSVPRLHDVGRFNGSLRT 480
DB      421 VKPMOLLENNYVLTTHVGGPLRFPDSSGNVDMEDYDKLWVQGSVPRLHDVGRFNGSLRT 480
QY      421 VKPMOLLENNYVLTTHVGGPLRFPDSSGNVDMEDYDKLWVQGSVPRLHDVGRFNGSLRT 480
DB      421 VKPMOLLENNYVLTTHVGGPLRFPDSSGNVDMEDYDKLWVQGSVPRLHDVGRFNGSLRT 480
QY      481 EBLKTRMHTSDNQKVSRSRCQSGOQVARKVAGFSSCCDVCDCBAGSTRQNPDIACTF 540
DB      481 EBLKTRMHTSDNQKVSRSRCQSGOQVARKVAGFSSCCDVCDCBAGSTRQNPDIACTF 540
QY      481 EBLKTRMHTSDNQKVSRSRCQSGOQVARKVAGFSSCCDVCDCBAGSTRQNPDIACTF 540
DB      481 EBLKTRMHTSDNQKVSRSRCQSGOQVARKVAGFSSCCDVCDCBAGSTRQNPDIACTF 540
QY      541 CGODEMSEBSTRRCRRRSRFLAMGEPALVLLLLLSLALGLVLAALGLFVHHRDSPLVQ 600
DB      541 CGODEMSEBSTRRCRRRSRFLAMGEPALVLLLLLSLALGLVLAALGLFVHHRDSPLVQ 600
QY      541 CGODEMSEBSTRRCRRRSRFLAMGEPALVLLLLLSLALGLVLAALGLFVHHRDSPLVQ 600
DB      541 CGODEMSEBSTRRCRRRSRFLAMGEPALVLLLLLSLALGLVLAALGLFVHHRDSPLVQ 600
QY      601 ASGGFLACGVLGVLCLSVLLFPQGPSPARCLAQOPLSHLPLTGCLSTFLQAAEITFV 660
DB      601 ASGGFLACGVLGVLCLSVLLFPQGPSPARCLAQOPLSHLPLTGCLSTFLQAAEITFV 660
```

```
QY      661 ESELPLSWADRLSGCLRGPMAMLVVLLAMLVVALCTWYLVAFPEVVTDMHMLPTEALV 720
DB      661 ESELPLSWADRLSGCLRGPMAMLVVLLAMLVVALCTWYLVAFPEVVTDMHMLPTEALV 720
QY      721 HCRTRSWVSGFLAHATNATLAFCLGTFPLVRSQPCYNRARGLTFLAMLAFTVWSFVP 780
DB      721 HCRTRSWVSGFLAHATNATLAFCLGTFPLVRSQPCYNRARGLTFLAMLAFTVWSFVP 780
QY      781 LLANVQVYLRPAVQMGALLLCVLGLLAFHLPRCYLLMRQGLNTPFEFLGGPDAGQ 840
DB      781 LLANVQVYLRPAVQMGALLLCVLGLLAFHLPRCYLLMRQGLNTPFEFLGGPDAGQ 840
QY      841 NDGNTGNGKHE 852
DB      841 NDGNTGNGKHE 852

RESULT 4
US-10-190-417-15
; Sequence 15, Application US/10190417
; Publication No. US20030166137A1
; GENERAL INFORMATION:
; APPLICANT: Zuker, Charles S.
; APPLICANT: Ryba, Nicholas J. P.
; APPLICANT: Chandrasekhar, Jayaram
; APPLICANT: Hoon, Mark A.
; APPLICANT: Nelson, Greg
; APPLICANT: Zhang, Yifeng
; APPLICANT: The Regents of the University of California
; APPLICANT: The Government of the United States of America
; APPLICANT: as represented by the Secretary of the
; APPLICANT: Department of Health and Human Services
; TITLE OF INVENTION: Mammalian Sweet and Amino Acid Heterodimeric Taste
; TITLE OF INVENTION: Receptors
; FILE REFERENCE: 02307E-120130US
; CURRENT APPLICATION NUMBER: US/10/190,417
; PRIOR FILING DATE: 2002-11-14
; PRIOR APPLICATION NUMBER: US 60/302,898
; PRIOR FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 09/927,315
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: US 60/358,925
; PRIOR FILING DATE: 2002-02-22
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 852
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: human T1R3
US-10-190-417-15

Query Match      100.0%; Score 4524; DB 14; Length 852;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 852; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MCGPAVLGLSLWALLHPGTGAPLCISQQLRMKG DYVLGGLFPLGEAEAGLSRTRPSSP 60
DB      1 MCGPAVLGLSLWALLHPGTGAPLCISQQLRMKG DYVLGGLFPLGEAEAGLSRTRPSSP 60
QY      61 VCTRSSNGCLMALMKAAVEINNKSDLLPGLRGYDLFPTCSEPPVAMKSLMFLAKA 120
DB      61 VCTRSSNGCLMALMKAAVEINNKSDLLPGLRGYDLFPTCSEPPVAMKSLMFLAKA 120
QY      61 VCTRSSNGCLMALMKAAVEINNKSDLLPGLRGYDLFPTCSEPPVAMKSLMFLAKA 120
DB      61 VCTRSSNGCLMALMKAAVEINNKSDLLPGLRGYDLFPTCSEPPVAMKSLMFLAKA 120
QY      121 GSRDIAACNTYQYOPRVLAIVGPHSSSELAVYTGKFFSFLMPQVSYGASMEILSARETF 180
DB      121 GSRDIAACNTYQYOPRVLAIVGPHSSSELAVYTGKFFSFLMPQVSYGASMEILSARETF 180
QY      121 GSRDIAACNTYQYOPRVLAIVGPHSSSELAVYTGKFFSFLMPQVSYGASMEILSARETF 180
DB      121 GSRDIAACNTYQYOPRVLAIVGPHSSSELAVYTGKFFSFLMPQVSYGASMEILSARETF 180
QY      181 PSFRTVPSDRVQLTAAAEILLQEFGMNVAALGSDDEYGRQGLSIFSLAARAGICIAHE 240
DB      181 PSFRTVPSDRVQLTAAAEILLQEFGMNVAALGSDDEYGRQGLSIFSLAARAGICIAHE 240
```

Qy 241 GLVPLPRADSRRLGKVQDVHLHQVNQSSVQVVLFPASVHAHALFNYSISSRLSPKVVAS 300  
Db 241 GLVPLPRADSRRLGKVQDVHLHQVNQSSVQVVLFPASVHAHALFNYSISSRLSPKVVAS 300  
Qy 301 EAMLTSDLVNGLPGMAQMGTVLGFLOKGAQLHEFPQYKTHLALATDPAFCGALGEREQ 360  
Db 301 EAMLTSDLVNGLPGMAQMGTVLGFLOKGAQLHEFPQYKTHLALATDPAFCGALGEREQ 360  
Qy 361 LEEDVVGORCPQDCITLQNVASAGLNHHQTFSSVAAVSVAAQLNHTLQCNASGCPADP 420  
Db 361 LEEDVVGORCPQDCITLQNVASAGLNHHQTFSSVAAVSVAAQLNHTLQCNASGCPADP 420  
Qy 421 VKPWQLNNMYNLTFHVGLPLRFDSSGNVMEYDLKLMWQGSVPRLDVGRFNGSLRT 480  
Db 421 VKPWQLNNMYNLTFHVGLPLRFDSSGNVMEYDLKLMWQGSVPRLDVGRFNGSLRT 480  
Qy 481 ERLKTRMTSDNQKRVSRCSROCGQVRRVKGFSGCCYDCVCEAGSYRONPDDIACTF 540  
Db 481 ERLKTRMTSDNQKRVSRCSROCGQVRRVKGFSGCCYDCVCEAGSYRONPDDIACTF 540  
Qy 541 CGODEMSPERSTRCPFRRSRFLAMGEPVLLLLLSLALGLVLAALGLFVHHRDSPLVQ 600  
Db 541 CGODEMSPERSTRCPFRRSRFLAMGEPVLLLLLSLALGLVLAALGLFVHHRDSPLVQ 600  
Qy 601 ASGGPLACFGVLGVLCLSVLLFPQOPSPARCLAQOPLSHLPLTGCLSTLFLQAAE1FV 660  
Db 601 ASGGPLACFGVLGVLCLSVLLFPQOPSPARCLAQOPLSHLPLTGCLSTLFLQAAE1FV 660  
Qy 661 ESELPLSMADRLSGCLRGPMAMLVLLMLVEVALCTWYLVAFPEPVVTDHMLPTEALV 720  
Db 661 ESELPLSMADRLSGCLRGPMAMLVLLMLVEVALCTWYLVAFPEPVVTDHMLPTEALV 720  
Qy 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLRSQPCYNBARGLTFAMLAFFITWVSFVP 780  
Db 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLRSQPCYNBARGLTFAMLAFFITWVSFVP 780  
Qy 781 LLANVQVVLPRPAVQMGALLLCVGLIAAFHLPRCYLLMRQPLNTPPEFLGGGPGDAQO 840  
Db 781 LLANVQVVLPRPAVQMGALLLCVGLIAAFHLPRCYLLMRQPLNTPPEFLGGGPGDAQO 840  
Qy 841 NDGNTGNQKGHE 852  
Db 841 NDGNTGNQKGHE 852

RESULT 5  
US-10-292-798-602  
; Sequence 602, Application US/10292798  
; Publication No. US20030235833A1  
; GENERAL INFORMATION:  
; APPLICANT: SUMA, MAKIKO  
; APPLICANT: ASAI, KIYOSHI  
; APPLICANT: AKIYAMA, YUTAKA  
; APPLICANT: ABURATANI, HIROYUKI  
; TITLE OF INVENTION: GANOSINE TRI PHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS  
; FILE REFERENCE: 084335/166  
; CURRENT APPLICATION NUMBER: US/10/292,798  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: 10/017,161  
; PRIOR FILING DATE: 2001-12-18  
; PRIOR APPLICATION NUMBER: JP 2001-246789  
; PRIOR FILING DATE: 2001-06-18  
; NUMBER OF SEQ ID NOS: 2070  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 602  
; LENGTH: 936  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-292-798-602

Query Match 100.0%; Score 4524; DB 15; Length 936;  
Beet Local Similarity 100.0%; Pred. No. 0;  
Matches 852; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLGPAVLGLSLMALHPEGTGAPLCLSQQLRMKGDYVLGGFLPGEAEEAGLRSTRPSSP 60  
Db 1 MLGPAVLGLSLMALHPEGTGAPLCLSQQLRMKGDYVLGGFLPGEAEEAGLRSTRPSSP 60  
Qy 61 VCTRFSNGLLMALMKAAVEINNKSDLLPGLRLGYDLFDTCSEPVVANKPSIMFLAKA 120  
Db 61 VCTRFSNGLLMALMKAAVEINNKSDLLPGLRLGYDLFDTCSEPVVANKPSIMFLAKA 120  
Qy 121 GSRDIAAYCNYTOYQPVVLAVIGPHSSELMVTKGKFSFPLMPOVSGASMEILSAETP 180  
Db 121 GSRDIAAYCNYTOYQPVVLAVIGPHSSELMVTKGKFSFPLMPOVSGASMEILSAETP 180  
Qy 181 PSFPRTPSDRVOLTTAAAEILQEFGNMVAALGSDDEYGRQGLSIFSAALAAAGICTAHE 240  
Db 181 PSFPRTPSDRVOLTTAAAEILQEFGNMVAALGSDDEYGRQGLSIFSAALAAAGICTAHE 240  
Qy 241 GLVPLPRADSRRLGKVQDVHLHQVNQSSVQVVLFPASVHAHALFNYSISSRLSPKVVAS 300  
Db 241 GLVPLPRADSRRLGKVQDVHLHQVNQSSVQVVLFPASVHAHALFNYSISSRLSPKVVAS 300  
Qy 301 EAMLTSDLVNGLPGMAQMGTVLGFLOKGAQLHEFPQYKTHLALATDPAFCGALGEREQ 360  
Db 301 EAMLTSDLVNGLPGMAQMGTVLGFLOKGAQLHEFPQYKTHLALATDPAFCGALGEREQ 360  
Qy 361 LEEDVVGORCPQDCITLQNVASAGLNHHQTFSSVAAVSVAAQLNHTLQCNASGCPADP 420  
Db 361 LEEDVVGORCPQDCITLQNVASAGLNHHQTFSSVAAVSVAAQLNHTLQCNASGCPADP 420  
Qy 421 VKPWQLNNMYNLTFHVGLPLRFDSSGNVMEYDLKLMWQGSVPRLDVGRFNGSLRT 480  
Db 421 VKPWQLNNMYNLTFHVGLPLRFDSSGNVMEYDLKLMWQGSVPRLDVGRFNGSLRT 480  
Qy 481 ERLKTRMTSDNQKRVSRCSROCGQVRRVKGFSGCCYDCVCEAGSYRONPDDIACTF 540  
Db 481 ERLKTRMTSDNQKRVSRCSROCGQVRRVKGFSGCCYDCVCEAGSYRONPDDIACTF 540  
Qy 541 CGODEMSPERSTRCPFRRSRFLAMGEPVLLLLLSLALGLVLAALGLFVHHRDSPLVQ 600  
Db 541 CGODEMSPERSTRCPFRRSRFLAMGEPVLLLLLSLALGLVLAALGLFVHHRDSPLVQ 600  
Qy 601 ASGGPLACFGVLGVLCLSVLLFPQOPSPARCLAQOPLSHLPLTGCLSTLFLQAAE1FV 660  
Db 601 ASGGPLACFGVLGVLCLSVLLFPQOPSPARCLAQOPLSHLPLTGCLSTLFLQAAE1FV 660  
Qy 661 ESELPLSMADRLSGCLRGPMAMLVLLMLVEVALCTWYLVAFPEPVVTDHMLPTEALV 720  
Db 661 ESELPLSMADRLSGCLRGPMAMLVLLMLVEVALCTWYLVAFPEPVVTDHMLPTEALV 720  
Qy 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLRSQPCYNBARGLTFAMLAFFITWVSFVP 780  
Db 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLRSQPCYNBARGLTFAMLAFFITWVSFVP 780  
Qy 781 LLANVQVVLPRPAVQMGALLLCVGLIAAFHLPRCYLLMRQPLNTPPEFLGGGPGDAQO 840  
Db 781 LLANVQVVLPRPAVQMGALLLCVGLIAAFHLPRCYLLMRQPLNTPPEFLGGGPGDAQO 840  
Qy 841 NDGNTGNQKGHE 852  
Db 841 NDGNTGNQKGHE 852

RESULT 6  
US-10-188-186-148  
; Sequence 148, Application US/10188186  
; Publication No. US20040029789A1  
; GENERAL INFORMATION:  
; APPLICANT: Anderson et al.  
; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME  
; FILE REFERENCE: 21402-397C  
; CURRENT APPLICATION NUMBER: US/10/188,186  
; PRIOR FILING DATE: 2002-07-02  
; PRIOR APPLICATION NUMBER: 60/303046

```

; PRIOR FILING DATE: 2001-07-05
; PRIOR APPLICATION NUMBER: 60/360814
; PRIOR FILING DATE: 2002-03-01
; PRIOR APPLICATION NUMBER: 60/303828
; PRIOR FILING DATE: 2001-09-07
; PRIOR APPLICATION NUMBER: 60/323380
; PRIOR FILING DATE: 2001-09-19
; PRIOR APPLICATION NUMBER: 60/361133
; PRIOR FILING DATE: 2002-03-01
; PRIOR APPLICATION NUMBER: 60/304016
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 60/304502
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 60/305262
; PRIOR FILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: 60/373881
; PRIOR FILING DATE: 2002-04-19
; PRIOR APPLICATION NUMBER: 60/305673
; PRIOR FILING DATE: 2001-07-16
; Remaining Prior Application data removed - See file Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 368
; SOFTWARE: Custom
; SEQ ID NO: 148
; LENGTH: 852
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-188-186-148

Query Match      99.8%; Score 4517; DB 12; Length 852;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 851; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1  MLGPAVLGLSLMALHPGTGAPLCLISQQLRMKGDIYVGLFPLGAEAEAGLRSRTRPSSP 60
DB      1  MLGPAVLGLSLMALHPGTGAPLCLISQQLRMKGDIYVGLFPLGAEAEAGLRSRTRPSSP 60
QY      61  VCTRSSNGLLMALMKAAVEEINKSDLLPGLRLGYDLFDTCSBPVYAMKPSLMFLAKA 120
DB      61  VCTRSSNGLLMALMKAAVEEINKSDLLPGLRLGYDLFDTCSBPVYAMKPSLMFLAKA 120
QY      121  GSRDIAAYCNTYOQPRVLAIVIGPHSSBLAVTGFSEFFLMPQVSYGASMBELLSARETF 180
DB      121  GSRDIAAYCNTYOQPRVLAIVIGPHSSBLAVTGFSEFFLMPQVSYGASMBELLSARETF 180
QY      181  PSFFFTVSDRYQLTAAAEELLQEFGMNVYALGSDDEYGRQGLSTFSALAAARGICIAHE 240
DB      181  PSFFFTVSDRYQLTAAAEELLQEFGMNVYALGSDDEYGRQGLSTFSALAAARGICIAHE 240
QY      241  GLVPLPRADDSRLGKVQDVLLHOVNOSSVQVYLLFASVHAHALFNYSISSRLSPRYWAS 300
DB      241  GLVPLPRADDSRLGKVQDVLLHOVNOSSVQVYLLFASVHAHALFNYSISSRLSPRYWAS 300
QY      301  EAMLTSDLVMLGPGMAQMGTVLGFLORGAQLHEFPQYVKTALATDPAFCGALGEREG 360
DB      301  EAMLTSDLVMLGPGMAQMGTVLGFLORGAQLHEFPQYVKTALATDPAFCGALGEREG 360
QY      361  LEEDVVGRCPCQDCITLQNVASAGLNHHQTFSVYAAVSVAAQLNHTLQCNASGCPADDP 420
DB      361  LEEDVVGRCPCQDCITLQNVASAGLNHHQTFSVYAAVSVAAQLNHTLQCNASGCPADDP 420
QY      421  VKPMLLENNVLTTHVGLPLRPFSSGVNDMEYDLKLVMMWQSPRLHDVGRFNGSLRT 480
DB      421  VKPMLLENNVLTTHVGLPLRPFSSGVNDMEYDLKLVMMWQSPRLHDVGRFNGSLRT 480
QY      481  ERLKTRMTSDNQKQEVSRCSROCOBQVARRVKGFFHSCCYDVCBAGSYRQNPDDIACF 540
DB      481  ERLKTRMTSDNQKQEVSRCSROCOBQVARRVKGFFHSCCYDVCBAGSYRQNPDDIACF 540
QY      541  CGODEWSPERSTRCRRRRSRFLAKGEPVALLLLLLSLALGLVLAALGLFVHHRSPLVQ 600
DB      541  CGODEWSPERSTRCRRRRSRFLAKGEPVALLLLLLSLALGLVLAALGLFVHHRSPLVQ 600
QY      601  ASGGLACGVLGVLGVLVLLFPQSPPARCLAQOPLSHLPLTGCLSTFLQAAEIV 660
```

```

DB      601  ASGGLACGVLGVLGVLVLLFPQSPPARCLAQOPLSHLPLTGCLSTFLQAAEIV 660
QY      661  ESELPLSWADRLSGCLGPGMAWLVLLAMLVVALCTMYLVAFPEVYTDHMLPTETLV 720
DB      661  ESELPLSWADRLSGCLGPGMAWLVLLAMLVVALCTMYLVAFPEVYTDHMLPTETLV 720
QY      721  HCTRSMVSPGLAATNATLAFCLGTFVRSQPGCYNRARGLTFAMLAFTWSEFVP 780
DB      721  HCTRSMVSPGLAATNATLAFCLGTFVRSQPGCYNRARGLTFAMLAFTWSEFVP 780
QY      781  LLANVOVLRPAVOMGALLCVLGIILAFHLPRCYLLMRQGLNTPPEFLGSGGDAQGO 840
DB      781  LLANVOVLRPAVOMGALLCVLGIILAFHLPRCYLLMRQGLNTPPEFLGSGGDAQGO 840
QY      841  NDGNTGNQKHE 852
DB      841  NDGNTGNQKHE 852
```

```

RESULT 7
US-09-796-338A-14
; Sequence 14, Application US/09796338A
; Patent No. US20020061522A1
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
; TITLE OF INVENTION: 1983, 52881, 2398, 45449, 50289, AND
; TITLE OF INVENTION: 52872, NOVEL G PROTEIN-COUPLED RECEPTORS AND USES THEREFOR
; FILE REFERENCE: 10448-020001
; CURRENT FILING DATE: US/09/796, 338A
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: US 60/186, 059
; PRIOR FILING DATE: 2000-02-29
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 852
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-796-338A-14
```

```

Query Match      99.7%; Score 4512; DB 9; Length 852;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 851; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1  MLGPAVLGLSLMALHPGTGAPLCLISQQLRMKGDIYVGLFPLGAEAEAGLRSRTRPSSP 60
DB      1  MLGPAVLGLSLMALHPGTGAPLCLISQQLRMKGDIYVGLFPLGAEAEAGLRSRTRPSSP 60
QY      61  VCTRSSNGLLMALMKAAVEEINKSDLLPGLRLGYDLFDTCSBPVYAMKPSLMFLAKA 120
DB      61  VCTRSSNGLLMALMKAAVEEINKSDLLPGLRLGYDLFDTCSBPVYAMKPSLMFLAKA 120
QY      121  GSRDIAAYCNTYOQPRVLAIVIGPHSSBLAVTGFSEFFLMPQVSYGASMBELLSARETF 180
DB      121  GSRDIAAYCNTYOQPRVLAIVIGPHSSBLAVTGFSEFFLMPQVSYGASMBELLSARETF 180
QY      181  PSFFFTVSDRYQLTAAAEELLQEFGMNVYALGSDDEYGRQGLSTFSALAAARGICIAHE 240
DB      181  PSFFFTVSDRYQLTAAAEELLQEFGMNVYALGSDDEYGRQGLSTFSALAAARGICIAHE 240
QY      241  GLVPLPRADDSRLGKVQDVLLHOVNOSSVQVYLLFASVHAHALFNYSISSRLSPRYWAS 300
DB      241  GLVPLPRADDSRLGKVQDVLLHOVNOSSVQVYLLFASVHAHALFNYSISSRLSPRYWAS 300
QY      301  EAMLTSDLVMLGPGMAQMGTVLGFLORGAQLHEFPQYVKTALATDPAFCGALGEREG 360
DB      301  EAMLTSDLVMLGPGMAQMGTVLGFLORGAQLHEFPQYVKTALATDPAFCGALGEREG 360
QY      361  LEEDVVGRCPCQDCITLQNVASAGLNHHQTFSVYAAVSVAAQLNHTLQCNASGCPADDP 420
DB      361  LEEDVVGRCPCQDCITLQNVASAGLNHHQTFSVYAAVSVAAQLNHTLQCNASGCPADDP 420
```

Qy 421 VKPQLLENNYNTLTFHVGGLPLRFDSSGNVDMEDYDLKLMWQGSVPRLHDVGRNGSLRT 480  
Db 421 VKPQLLENNYNTLTFHVGGLPLRFDSSGNVDMEDYDLKLMWQGSVPRLHDVGRFNGSLRT 480  
Qy 481 ERLKIRMTSDNOKRVSRCSRCOCGQVRRVKGFFHSCCYDCVDCBAGSYRONPDDIACTF 540  
Db 481 ERLKIRMTSDNOKRVSRCSRCOCGQVRRVKGFFHSCCYDCVDCBAGSYRONPDDIACTF 540  
Qy 541 CGODEMSPERSTRCFRRRSRFLWGPBPAVLILLLLSLALGLVLAALGLFVHHRDSPLVQ 600  
Db 541 CGODEMSPERSTRCFRRRSRFLWGPBPAVLILLLLSLALGLVLAALGLFVHHRDSPLVQ 600  
Qy 601 ASGGPLACFGVLCGLVCLSVLLFPQGPSPARCLAAQPLSHLPLTGCLSTFLQAABIFV 660  
Db 601 ASGGPLACFGVLCGLVCLSVLLFPQGPSPARCLAAQPLSHLPLTGCLSTFLQAABIFV 660  
Qy 661 ESELPLSMADRLSGCLRGPMAMLVYLLAMLVVALCTWYLVAFPEVVTDMHMLPTEALV 720  
Db 661 ESELPLSMADRLSGCLRGPMAMLVYLLAMLVVALCTWYLVAFPEVVTDMHMLPTEALV 720  
Qy 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLRSQPGCYNRARGLTFAMLAFFITWVSFVP 780  
Db 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLRSQPGCYNRARGLTFAMLAFFITWVSFVP 780  
Qy 781 LLANVOVVLRAVQMGALLLCVGLIAAFHLPRCYLLMRQPGMLNTPPEFLLGGGPGDAQOQ 840  
Db 781 LLANVOVVLRAVQMGALLLCVGLIAAFHLPRCYLLMRQPGMLNTPPEFLLGGGPGDAQOQ 840  
Qy 841 NDGNTNGQKHE 852  
Db 841 NDGNTNGQKHE 852

RESULT 8  
US-10-261-482-2  
; Sequence 2, Application US/10261482  
; Publication No. US20030036089A1  
; GENERAL INFORMATION:  
; APPLICANT: WEI, Ming-Hui et al  
; TITLE OF INVENTION: ISOLATED HUMAN G-PROTEIN COUPLED  
; TITLE OF INVENTION: RECEPTORS, NUCLEIC ACID MOLECULES ENCODING HUMAN GPCR  
; TITLE OF INVENTION: PROTEINS, AND USES THEREOF  
; FILE REFERENCE: CLO00869CON  
; CURRENT APPLICATION NUMBER: US/10/261,482  
; CURRENT FILING DATE: 2002-10-02  
; PRIOR APPLICATION NUMBER: 09/684,393  
; PRIOR FILING DATE: 2000-10-10  
; PRIOR APPLICATION NUMBER: 60/172,600  
; PRIOR FILING DATE: 1999-12-20  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: FASTSEQ for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 852  
; TYPE: PRT  
; ORGANISM: HUMAN  
US-10-261-482-2

Query Match 99.7%; Score 4512; DB 14; Length 852;  
Best Local Similarity 99.9%; Pred. No. 0;  
Matches 851; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MLGPAVLGLSLMALHPGTGAPLCLISQQLRMKGVDVVLGGLPPLGAEBAAGLSRTRPSP 60  
Db 1 MLGPAVLGLSLMALHPGTGAPLCLISQQLRMKGVDVVLGGLPPLGAEBAAGLSRTRPSP 60  
Qy 61 VCTRSSNGGLMALMKAAVEEINKSDLLPGLRLGYDLPTGCSEPPVAMKPSLMFLAKA 120  
Db 61 VCTRSSNGGLMALMKAAVEEINKSDLLPGLRLGYDLPTGCSEPPVAMKPSLMFLAKA 120  
Qy 121 GSRDIAACNTQYQPRVLAVIGPHSSELAWTGKFSFPLMPOVSYGASMEILSARPTF 180  
Db 121 GSRDIAACNTQYQPRVLAVIGPHSSELAWTGKFSFPLMPOVSYGASMEILSARPTF 180

Qy 181 PSFPRVPSDRVQJTAABELLQEFGMWVVALSGDDEYGRQGLSIFSAALAAARGICIAHE 240  
Db 181 PSFPRVPSDRVQJTAABELLQEFGMWVVALSGDDEYGRQGLSIFSAALAAARGICIAHE 240  
Qy 241 GLVFLPRADDSRLKQDVYLHQNQSSVQVYLLFASVHAHALPNYSISSRLSPKVVAS 300  
Db 241 GLVFLPRADDSRLKQDVYLHQNQSSVQVYLLFASVHAHALPNYSISSRLSPKVVAS 300  
Qy 301 EAMTSDLVNGLPGMAQMGTVLGLQGAQOLHEFPQYVKTHTALATPAFCSALGEREOG 360  
Db 301 EAMTSDLVNGLPGMAQMGTVLGLQGAQOLHEFPQYVKTHTALATPAFCSALGEREOG 360  
Qy 361 LEEBVGQRCPCDCITLQNVASAGLNHRQTFSSVYAAYVSAQALHNTLQCNASGCPADP 420  
Db 361 LEEBVGQRCPCDCITLQNVASAGLNHRQTFSSVYAAYVSAQALHNTLQCNASGCPADP 420  
Qy 421 VKPQLLENNYNTLTFHVGGLPLRFDSSGNVDMEDYDLKLMWQGSVPRLHDVGRNGSLRT 480  
Db 421 VKPQLLENNYNTLTFHVGGLPLRFDSSGNVDMEDYDLKLMWQGSVPRLHDVGRNGSLRT 480  
Qy 481 ERLKIRMTSDNOKRVSRCSRCOCGQVRRVKGFFHSCCYDCVDCBAGSYRONPDDIACTF 540  
Db 481 ERLKIRMTSDNOKRVSRCSRCOCGQVRRVKGFFHSCCYDCVDCBAGSYRONPDDIACTF 540  
Qy 541 CGODEMSPERSTRCFRRRSRFLWGPBPAVLILLLLSLALGLVLAALGLFVHHRDSPLVQ 600  
Db 541 CGODEMSPERSTRCFRRRSRFLWGPBPAVLILLLLSLALGLVLAALGLFVHHRDSPLVQ 600  
Qy 601 ASGGPLACFGVLCGLVCLSVLLFPQGPSPARCLAAQPLSHLPLTGCLSTFLQAABIFV 660  
Db 601 ASGGPLACFGVLCGLVCLSVLLFPQGPSPARCLAAQPLSHLPLTGCLSTFLQAABIFV 660  
Qy 661 ESELPLSMADRLSGCLRGPMAMLVYLLAMLVVALCTWYLVAFPEVVTDMHMLPTEALV 720  
Db 661 ESELPLSMADRLSGCLRGPMAMLVYLLAMLVVALCTWYLVAFPEVVTDMHMLPTEALV 720  
Qy 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLRSQPGCYNRARGLTFAMLAFFITWVSFVP 780  
Db 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLRSQPGCYNRARGLTFAMLAFFITWVSFVP 780  
Qy 781 LLANVOVVLRAVQMGALLLCVGLIAAFHLPRCYLLMRQPGMLNTPPEFLLGGGPGDAQOQ 840  
Db 781 LLANVOVVLRAVQMGALLLCVGLIAAFHLPRCYLLMRQPGMLNTPPEFLLGGGPGDAQOQ 840  
Qy 841 NDGNTNGQKHE 852  
Db 841 NDGNTNGQKHE 852

RESULT 9  
US-10-282-837-14  
; Sequence 14, Application US/10282837  
; Publication No. US20030082738A1  
; GENERAL INFORMATION:  
; APPLICANT: Millennium Pharmaceuticals, Inc.  
; TITLE OF INVENTION: 1983, 52881, 2398, 45449, 50289, AND  
; TITLE OF INVENTION: 52872, NOVEL G PROTEIN-COUPLED RECEPTORS AND USES THEREFOR  
; FILE REFERENCE: 10448-020001  
; CURRENT APPLICATION NUMBER: US/10/282,837  
; CURRENT FILING DATE: 2002-10-29  
; PRIOR APPLICATION NUMBER: US/09/796,338  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: US 60/166,059  
; PRIOR FILING DATE: 2000-02-29  
; NUMBER OF SEQ ID NOS: 26  
; SOFTWARE: FASTSEQ for Windows Version 4.0  
; SEQ ID NO 14  
; LENGTH: 852  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-282-837-14

Query Match 99.7%; Score 4512; DB 14; Length 852;

Best Local Similarity 99.9%; Pred. No. 0;  
Matches 851; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MGPAVLGSLWALHPGTGAPLCLSQQLRMKGDYVLGGLPFLGAEAGLSRTRPSSP 60  
DB 1 MGPALVGLSLWALHPGTGAPLCLSQQLRMKGDYVLGGLPFLGAEAGLSRTRPSSP 60  
QY 61 VCTRSSNGLLMALMKMAVEEINNKSDDLPLGLRGYDLPDTCSEPVVAMKPSLMLAKA 120  
DB 61 VCTRSSNGLLMALMKMAVEEINNKSDDLPLGLRGYDLPDTCSEPVVAMKPSLMLAKA 120  
QY 121 GSRDIAAYCNTYOQPRVLAIVGPHSSSELAWYTKFSEFLMPQVSYGASMELLSARETF 180  
DB 121 GSRDIAAYCNTYOQPRVLAIVGPHSSSELAWYTKFSEFLMPQVSYGASMELLSARETF 180  
QY 181 PSFPRVPSDRVQLTAAAELOEFEGMNWVAALGSDDEYRGQGLSIFSAALAAAGICIAHE 240  
DB 181 PSFPRVPSDRVQLTAAAELOEFEGMNWVAALGSDDEYRGQGLSIFSAALAAAGICIAHE 240  
QY 241 GLVPLPRADDSRLGKVQDVLHQVNOSSVOVVLFPASVHAHALFNYSISSRLSPKMWAS 300  
DB 241 GLVPLPRADDSRLGKVQDVLHQVNOSSVOVVLFPASVHAHALFNYSISSRLSPKMWAS 300  
QY 301 EAMLTSDLVWGLPGMAQMGTVLFLQGAQLHEFPQYKTHALATDPAFCALGEREG 360  
DB 301 EAMLTSDLVWGLPGMAQMGTVLFLQGAQLHEFPQYKTHALATDPAFCALGEREG 360  
QY 361 LEBDVVQRCPCQDCITLQNVSAAGLNHQTFSYAAVSVVAQALHNTLQCNAGCPADP 420  
DB 361 LEBDVVQRCPCQDCITLQNVSAAGLNHQTFSYAAVSVVAQALHNTLQCNAGCPADP 420  
QY 421 VKPMOLLEMYNLTFHVGLPLRFDSSGNVMEYDKLWMOGQSVRLHDVGRFNGSLRT 480  
DB 421 VKPMOLLEMYNLTFHVGLPLRFDSSGNVMEYDKLWMOGQSVRLHDVGRFNGSLRT 480  
QY 481 ERLKIRMTSDNQKPVSRSCROCEGOVARVKGFSGCCYDCEAGSYRONDDIACF 540  
DB 481 ERLKIRMTSDNQKPVSRSCROCEGOVARVKGFSGCCYDCEAGSYRONDDIACF 540  
QY 541 CGODEMSPERSTRCRRRSRFLANGEPAYLLLLLSLALGLVLAALGFVHHRSPLVQ 600  
DB 541 CGODEMSPERSTRCRRRSRFLANGEPAYLLLLLSLALGLVLAALGFVHHRSPLVQ 600  
QY 601 ASGGPLACGVLGVLGVLCSVLLPFGQSPARCIAQOPLSHLPLTGCLSTLFLQAAEITFV 660  
DB 601 ASGGPLACGVLGVLGVLCSVLLPFGQSPARCIAQOPLSHLPLTGCLSTLFLQAAEITFV 660  
QY 661 ESELPLSWADRLSGCLRGPMWLVLLAMLEVALCTWYLVAFPEVVTDMHMLPTEALV 720  
DB 661 ESELPLSWADRLSGCLRGPMWLVLLAMLEVALCTWYLVAFPEVVTDMHMLPTEALV 720  
QY 721 HCRTRSWVSFGLAHATNATLAFCLGTLFVRSQPCYNRARGLTFAMLAFFITWVSFVP 780  
DB 721 HCRTRSWVSFGLAHATNATLAFCLGTLFVRSQPCYNRARGLTFAMLAFFITWVSFVP 780  
QY 781 LIANOVVLRPAVONGALLCYLGLIAAHLRCVILAMPQGLNTPPEFLGGPQDAQO 840  
DB 781 LIANOVVLRPAVONGALLCYLGLIAAHLRCVILAMPQGLNTPPEFLGGPQDAQO 840  
QY 841 NDGNTGNGKHE 852  
DB 841 NDGNTGNGKHE 852

RESULT 10  
US-10-145-586-14  
; Sequence 14, Application US/10145586  
; Publication No. US20030138890A1  
; GENERAL INFORMATION:  
; APPLICANT: Alexandra Glucksmann, Maria  
; APPLICANT: Silos-Santiago, Immaculada  
; APPLICANT: M. Galvin, Katherine  
; APPLICANT: Weich, Nadine

APPLICANT: Curtis, Rory A.J.  
APPLICANT: Bandaru, Rajasekhar  
APPLICANT: Kapeller, Lieberman, Rosana  
TITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTOR FAMILY MEMBERS,  
TITLE OF INVENTION: HUMAN THIOREDOXIN FAMILY MEMBERS, HUMAN LEUCINE-RICH  
FILE REFERENCE: 10448-188001  
CURRENT APPLICATION NUMBER: US/10/145,586  
CURRENT FILING DATE: 2002-05-14  
NUMBER OF SEQ ID NOS: 95  
SOFTWARE: FASTSEQ for Windows Version 4.0  
SEQ ID NO 14  
LENGTH: 852  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-145-586-14

Query Match 99.7%; Score 4512; DB 14; Length 852;  
Best Local Similarity 99.9%; Pred. No. 0;  
Matches 851; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MGPAVLGSLWALHPGTGAPLCLSQQLRMKGDYVLGGLPFLGAEAGLSRTRPSSP 60  
DB 1 MGPALVGLSLWALHPGTGAPLCLSQQLRMKGDYVLGGLPFLGAEAGLSRTRPSSP 60  
QY 61 VCTRSSNGLLMALMKMAVEEINNKSDDLPLGLRGYDLPDTCSEPVVAMKPSLMLAKA 120  
DB 61 VCTRSSNGLLMALMKMAVEEINNKSDDLPLGLRGYDLPDTCSEPVVAMKPSLMLAKA 120  
QY 121 GSRDIAAYCNTYOQPRVLAIVGPHSSSELAWYTKFSEFLMPQVSYGASMELLSARETF 180  
DB 121 GSRDIAAYCNTYOQPRVLAIVGPHSSSELAWYTKFSEFLMPQVSYGASMELLSARETF 180  
QY 181 PSFPRVPSDRVQLTAAAELOEFEGMNWVAALGSDDEYRGQGLSIFSAALAAAGICIAHE 240  
DB 181 PSFPRVPSDRVQLTAAAELOEFEGMNWVAALGSDDEYRGQGLSIFSAALAAAGICIAHE 240  
QY 241 GLVPLPRADDSRLGKVQDVLHQVNOSSVOVVLFPASVHAHALFNYSISSRLSPKMWAS 300  
DB 241 GLVPLPRADDSRLGKVQDVLHQVNOSSVOVVLFPASVHAHALFNYSISSRLSPKMWAS 300  
QY 301 EAMLTSDLVWGLPGMAQMGTVLFLQGAQLHEFPQYKTHALATDPAFCALGEREG 360  
DB 301 EAMLTSDLVWGLPGMAQMGTVLFLQGAQLHEFPQYKTHALATDPAFCALGEREG 360  
QY 361 LEBDVVQRCPCQDCITLQNVSAAGLNHQTFSYAAVSVVAQALHNTLQCNAGCPADP 420  
DB 361 LEBDVVQRCPCQDCITLQNVSAAGLNHQTFSYAAVSVVAQALHNTLQCNAGCPADP 420  
QY 421 VKPMOLLEMYNLTFHVGLPLRFDSSGNVMEYDKLWMOGQSVRLHDVGRFNGSLRT 480  
DB 421 VKPMOLLEMYNLTFHVGLPLRFDSSGNVMEYDKLWMOGQSVRLHDVGRFNGSLRT 480  
QY 481 ERLKIRMTSDNQKPVSRSCROCEGOVARVKGFSGCCYDCEAGSYRONDDIACF 540  
DB 481 ERLKIRMTSDNQKPVSRSCROCEGOVARVKGFSGCCYDCEAGSYRONDDIACF 540  
QY 541 CGODEMSPERSTRCRRRSRFLANGEPAYLLLLLSLALGLVLAALGFVHHRSPLVQ 600  
DB 541 CGODEMSPERSTRCRRRSRFLANGEPAYLLLLLSLALGLVLAALGFVHHRSPLVQ 600  
QY 601 ASGGPLACGVLGVLGVLCSVLLPFGQSPARCIAQOPLSHLPLTGCLSTLFLQAAEITFV 660  
DB 601 ASGGPLACGVLGVLGVLCSVLLPFGQSPARCIAQOPLSHLPLTGCLSTLFLQAAEITFV 660  
QY 661 ESELPLSWADRLSGCLRGPMWLVLLAMLEVALCTWYLVAFPEVVTDMHMLPTEALV 720  
DB 661 ESELPLSWADRLSGCLRGPMWLVLLAMLEVALCTWYLVAFPEVVTDMHMLPTEALV 720  
QY 721 HCRTRSWVSFGLAHATNATLAFCLGTLFVRSQPCYNRARGLTFAMLAFFITWVSFVP 780  
DB 721 HCRTRSWVSFGLAHATNATLAFCLGTLFVRSQPCYNRARGLTFAMLAFFITWVSFVP 780

Qy 761 LLANQVVLPRPVGKALLLCVLTGILAAFHLPKCYLNRKOPGLNTPPEFFLGCGPGDAGQ 840  
Db 761 LLANQVVLPRPVGKALLLCVLTGILAAFHLPKCYLNRKOPGLNTPPEFFLGCGPGDAGQ 840  
Qy 841 NDGNTGNQKHE 852  
Db 841 NDGNTGNQKHE 852

RESULT 11  
US-10-407-079-90  
Sequence 90, Application US/10407079  
Publication No. US20030215860A1  
GENERAL INFORMATION:  
APPLICANT: Millennium Pharmaceuticals, Inc.  
APPLICANT: Glucksmann, Maria A.  
APPLICANT: Siles-Santiago, Inmaculada  
APPLICANT: Carroll, Joseph M.  
APPLICANT: Galvin, Katherine M.  
TITLE OF INVENTION: 16636, 2466, 43238, 1983, 52881, 2398,  
TITLE OF INVENTION: 45449, 50289, 52872 AND 26908 MOLECULES AND USES THEREFOR  
FILE REFERENCE: MP103-0510MNM  
CURRENT FILING DATE: 2003-04-03  
PRIOR APPLICATION NUMBER: US/10/407, 079  
PRIOR FILING DATE: 2002-08-22  
PRIOR APPLICATION NUMBER: US 60/314, 041  
PRIOR FILING DATE: 2001-08-22  
PRIOR APPLICATION NUMBER: US 10/225, 094  
PRIOR FILING DATE: 2002-08-21  
PRIOR APPLICATION NUMBER: US 60/314, 185  
PRIOR FILING DATE: 2001-08-22  
PRIOR APPLICATION NUMBER: US 10/272, 417  
PRIOR FILING DATE: 2002-10-15  
PRIOR APPLICATION NUMBER: US 09/715, 790  
PRIOR FILING DATE: 2000-11-17  
PRIOR APPLICATION NUMBER: US 60/191, 845  
PRIOR FILING DATE: 2000-03-24  
PRIOR APPLICATION NUMBER: US 10/282, 837  
PRIOR FILING DATE: 2002-10-29  
PRIOR APPLICATION NUMBER: US 09/796, 338  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: US 60/186, 059  
PRIOR FILING DATE: 2000-02-29  
Remaining Prior Application data removed - See file wrapper or PALM.  
NUMBER OF SEQ ID NOS: 110  
SOFTWARE: fastseq for Windows Version 4.0  
SEQ ID NO 90  
LENGTH: 852  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-407-079-90

Query Match 99.7%; Score 4512; DB 15; Length 852;  
Best Local Similarity 99.9%; Pred. No. 0;  
Matches 851; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 241 GLVPLPRADSRKGVQDVLIHQVNSSVQVVLFPASVHAALFNYSISSRLSPKVVAS 300  
Db 241 GLVPLPRADSRKGVQDVLIHQVNSSVQVVLFPASVHAALFNYSISSRLSPKVVAS 300  
Qy 301 EAWLTSDLVNGLPQMAQGVTLGFLQGAQLHEFPQYKTHLATDPACSAIGEREQ 360  
Db 301 EAWLTSDLVNGLPQMAQGVTLGFLQGAQLHEFPQYKTHLATDPACSAIGEREQ 360  
Qy 361 LEEDVQRCPCQCCITLQNVNSAGLNHQTFSVVAAYSAQALHNTLQCNASGCPADP 420  
Db 361 LEEDVQRCPCQCCITLQNVNSAGLNHQTFSVVAAYSAQALHNTLQCNASGCPADP 420  
Qy 421 VKPQQLNNYNTLFFHYGGLPLRPDSSSGNVDMEYDLKLWQSGVPLHVDGRNGSLRT 480  
Db 421 VKPQQLNNYNTLFFHYGGLPLRPDSSSGNVDMEYDLKLWQSGVPLHVDGRNGSLRT 480  
Qy 481 ERLKIRWHTSDNQKRVSCRSRQCEGVRRVKGHSCCYDCVDCAGSYRQNPDIACTF 540  
Db 481 ERLKIRWHTSDNQKRVSCRSRQCEGVRRVKGHSCCYDCVDCAGSYRQNPDIACTF 540  
Qy 541 CGQDENSPESTRCFRRRSRFLAMGEPANVLILLLSLALGVLAALGLFVHHRDSPVQ 600  
Db 541 CGQDENSPESTRCFRRRSRFLAMGEPANVLILLLSLALGVLAALGLFVHHRDSPVQ 600  
Qy 601 ASGGPLACFGVLCGLVCLSVLFPQGPSPARCIAQOPLSHLPLTGCLSTFLQAAEFV 660  
Db 601 ASGGPLACFGVLCGLVCLSVLFPQGPSPARCIAQOPLSHLPLTGCLSTFLQAAEFV 660  
Qy 661 ESELPLSMADRLSGCLGPGPAMVLVLLAMLEVALCTWYLAAPPEVVTDMHMLPTEALV 720  
Db 661 ESELPLSMADRLSGCLGPGPAMVLVLLAMLEVALCTWYLAAPPEVVTDMHMLPTEALV 720  
Qy 721 HCRTRSWVSFGLAATAATLAFCLGTPLVRSGPCVNAARGTFLMAYFTWVSFVP 780  
Db 721 HCRTRSWVSFGLAATAATLAFCLGTPLVRSGPCVNAARGTFLMAYFTWVSFVP 780  
Qy 781 LLANQVVLPRPVGKALLLCVLTGILAAFHLPKCYLNRKOPGLNTPPEFFLGCGPGDAGQ 840  
Db 781 LLANQVVLPRPVGKALLLCVLTGILAAFHLPKCYLNRKOPGLNTPPEFFLGCGPGDAGQ 840  
Qy 841 NDGNTGNQKHE 852  
Db 841 NDGNTGNQKHE 852

RESULT 12  
US-10-179-373-7  
Sequence 7, Application US/10179373  
Publication No. US20030232407A1  
GENERAL INFORMATION:  
APPLICANT: ZOLLER, MARK  
APPLICANT: LI, XIAODONG  
APPLICANT: STASZEWSKI, LENA  
APPLICANT: O'CONNELL, SHAWN  
APPLICANT: ZOCULYA, SERGEY  
APPLICANT: ADLER, JON  
APPLICANT: XU, HONG  
APPLICANT: ECHEVERRI, FERNANDO  
TITLE OF INVENTION: T1R HETERO-OLIGOMERIC TASTE RECEPTORS AND CELL LINES  
TITLE OF INVENTION: THAT EXPRESS SAID RECEPTORS AND USE THEREOF FOR  
FILE REFERENCE: 078003-0291566  
CURRENT APPLICATION NUMBER: US/10/179, 373  
CURRENT FILING DATE: 2002-06-26  
PRIOR APPLICATION NUMBER: 60/300, 434  
PRIOR FILING DATE: 2001-06-26  
PRIOR APPLICATION NUMBER: 60/304, 749  
PRIOR FILING DATE: 2001-07-13  
PRIOR APPLICATION NUMBER: 60/310, 493  
PRIOR FILING DATE: 2001-08-08  
PRIOR APPLICATION NUMBER: 60/331, 771  
PRIOR FILING DATE: 2001-11-21

; PRIOR APPLICATION NUMBER: 60/339,472  
 ; PRIOR FILING DATE: 2001-12-14  
 ; PRIOR APPLICATION NUMBER: 60/372,090  
 ; PRIOR FILING DATE: 2002-04-15  
 ; PRIOR APPLICATION NUMBER: 60/374,143  
 ; PRIOR FILING DATE: 2002-04-22  
 ; NUMBER OF SEQ ID NOS: 19  
 ; SOFTWARE: Patent In Ver. 2.1  
 ; SEQ ID NO 7  
 ; LENGTH: 852  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-10-179-373-7

Query Match 99.7%; Score 4512; DB 15; Length 852;  
 Best Local Similarity 99.9%; Pred. No. 0;  
 Matches 851; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MGPVAVGLSLWALLHPGTGAPLCLSQQLRMKGIVLGGFLPGAEEAGLSRTRPSP 60  
 DB 1 MGPVAVGLSLWALLHPGTGAPLCLSQQLRMKGIVLGGFLPGAEEAGLSRTRPSP 60  
 QY 61 VCTRSSNGLLMALMKAAVEEINKSDLLPGLRLGYDLFTCSEPVVAMKPSLMFLAKA 120  
 DB 61 VCTRSSNGLLMALMKAAVEEINKSDLLPGLRLGYDLFTCSEPVVAMKPSLMFLAKA 120  
 QY 121 GSRDIAACNTYOQPRVLAIVGPHSSSLAWVTGKFFSLMPOVSYGASWELLSARETF 180  
 DB 121 GSRDIAACNTYOQPRVLAIVGPHSSSLAWVTGKFFSLMPOVSYGASWELLSARETF 180  
 QY 181 PSFRTVSDRVQVLTAAELLQEFGMNVVAALGSDDEYGRQGLSIFSALAAARGICIAHE 240  
 DB 181 PSFRTVSDRVQVLTAAELLQEFGMNVVAALGSDDEYGRQGLSIFSALAAARGICIAHE 240  
 QY 241 GLVPLPRADDSRLGKVQDVHLHQVNSVQVVLFFASVHAHALFNYSSISRLSPKVVAS 300  
 DB 241 GLVPLPRADDSRLGKVQDVHLHQVNSVQVVLFFASVHAHALFNYSSISRLSPKVVAS 300  
 QY 301 EAMLTSDLVKGLPGMAQGTVLGFLQGAQLHEFPQVYKTHALATDPAFCGALGERBOG 360  
 DB 301 EAMLTSDLVKGLPGMAQGTVLGFLQGAQLHEFPQVYKTHALATDPAFCGALGERBOG 360  
 QY 361 LEEVDVQGRCPQCCITLQNVSAAGLNHHQTFSSVAAVSVAAQALNHTLQCNASGCPADP 420  
 DB 361 LEEVDVQGRCPQCCITLQNVSAAGLNHHQTFSSVAAVSVAAQALNHTLQCNASGCPADP 420  
 QY 421 VKPQQLLENNYNTLTFHVGGPLRFDSSGNVMEYDLKLMWQGSVPRLHDVGRFNGSLRT 480  
 DB 421 VKPQQLLENNYNTLTFHVGGPLRFDSSGNVMEYDLKLMWQGSVPRLHDVGRFNGSLRT 480  
 QY 481 ERLKTRMTSDNOKVSRCSRCQCGOVRVKGPHSCCYDCYDCAGSYRONPDIACTF 540  
 DB 481 ERLKTRMTSDNOKVSRCSRCQCGOVRVKGPHSCCYDCYDCAGSYRONPDIACTF 540  
 QY 541 CGODEMSEPSRTRCFRRRSRFLWGPAYLILLLLSLALGLVLAALGLFVHHRDSPLYQ 600  
 DB 541 CGODEMSEPSRTRCFRRRSRFLWGPAYLILLLLSLALGLVLAALGLFVHHRDSPLYQ 600  
 QY 601 ASGGLACFGIVCLVCLSVLLFPQGPSPARCLAQOPLSHLPLTGCLSTLFLQAAELFV 660  
 DB 601 ASGGLACFGIVCLVCLSVLLFPQGPSPARCLAQOPLSHLPLTGCLSTLFLQAAELFV 660  
 QY 661 ESELPLSWADRSLGCLRGPMWLVVLLMLVEVALCTWLVAFPEVVYTDWMTLETALV 720  
 DB 661 ESELPLSWADRSLGCLRGPMWLVVLLMLVEVALCTWLVAFPEVVYTDWMTLETALV 720  
 QY 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLSOGCVNBARAGLFFAMLAAYITWVSFP 780  
 DB 721 HCRTRSWVSFGLAHATNATLAFCLGTFVLSOGCVNBARAGLFFAMLAAYITWVSFP 780  
 QY 781 LLANQVAVLPAVQWGAALLCVLGLILAAFHLPKRCYLLMKRQGLNPEFFLGSGPDAQO 840  
 DB 781 LLANQVAVLPAVQWGAALLCVLGLILAAFHLPKRCYLLMKRQGLNPEFFLGSGPDAQO 840

QY 841 NDGNTNGQKHE 852  
 DB 841 NDGNTNGQKHE 852

RESULT 13  
 US-10-280-183A-5  
 ; Sequence 5, Application US/10280183A  
 ; Publication No. US20040081964A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Pfizer Inc.  
 ; APPLICANT: Bachmanov, Alexander A  
 ; APPLICANT: Beauchamp, Gary K.  
 ; APPLICANT: Chatterjee, Anubindo  
 ; APPLICANT: De Jong, Pieter J.  
 ; APPLICANT: Li, Shanru  
 ; APPLICANT: Li, Xia  
 ; APPLICANT: Ohmen, Jeffrey D  
 ; APPLICANT: Reed, Danielle R.  
 ; APPLICANT: Ross, David  
 ; APPLICANT: Tordoff, Michael G.  
 ; TITLE OF INVENTION: GENE AND SEQUENCE VARIATION ASSOCIATED WITH SENSING  
 ; TITLE OF INVENTION: CARBOHYDRATE COMPOUNDS AND OTHER SWEETENERS  
 ; FILE REFERENCE: PCI8306A  
 ; CURRENT APPLICATION NUMBER: US/10/280,183A  
 ; PRIOR APPLICATION NUMBER: 60/200,794  
 ; PRIOR FILING DATE: 2000-04-28  
 ; NUMBER OF SEQ ID NOS: 652  
 ; SOFTWARE: Patent In Ver. 3.1  
 ; SEQ ID NO 5  
 ; LENGTH: 852  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-10-280-183A-5

Query Match 99.7%; Score 4509; DB 16; Length 852;  
 Best Local Similarity 99.8%; Pred. No. 0;  
 Matches 850; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MGPVAVGLSLWALLHPGTGAPLCLSQQLRMKGIVLGGFLPGAEEAGLSRTRPSP 60  
 DB 1 MGPVAVGLSLWALLHPGTGAPLCLSQQLRMKGIVLGGFLPGAEEAGLSRTRPSP 60  
 QY 61 VCTRSSNGLLMALMKAAVEEINKSDLLPGLRLGYDLFTCSEPVVAMKPSLMFLAKA 120  
 DB 61 VCTRSSNGLLMALMKAAVEEINKSDLLPGLRLGYDLFTCSEPVVAMKPSLMFLAKA 120  
 QY 121 GSRDIAACNTYOQPRVLAIVGPHSSSLAWVTGKFFSLMPOVSYGASWELLSARETF 180  
 DB 121 GSRDIAACNTYOQPRVLAIVGPHSSSLAWVTGKFFSLMPOVSYGASWELLSARETF 180  
 QY 181 PSFRTVSDRVQVLTAAELLQEFGMNVVAALGSDDEYGRQGLSIFSALAAARGICIAHE 240  
 DB 181 PSFRTVSDRVQVLTAAELLQEFGMNVVAALGSDDEYGRQGLSIFSALAAARGICIAHE 240  
 QY 241 GLVPLPRADDSRLGKVQDVHLHQVNSVQVVLFFASVHAHALFNYSSISRLSPKVVAS 300  
 DB 241 GLVPLPRADDSRLGKVQDVHLHQVNSVQVVLFFASVHAHALFNYSSISRLSPKVVAS 300  
 QY 301 EAMLTSDLVKGLPGMAQGTVLGFLQGAQLHEFPQVYKTHALATDPAFCGALGERBOG 360  
 DB 301 EAMLTSDLVKGLPGMAQGTVLGFLQGAQLHEFPQVYKTHALATDPAFCGALGERBOG 360  
 QY 361 LEEVDVQGRCPQCCITLQNVSAAGLNHHQTFSSVAAVSVAAQALNHTLQCNASGCPADP 420  
 DB 361 LEEVDVQGRCPQCCITLQNVSAAGLNHHQTFSSVAAVSVAAQALNHTLQCNASGCPADP 420  
 QY 421 VKPQQLLENNYNTLTFHVGGPLRFDSSGNVMEYDLKLMWQGSVPRLHDVGRFNGSLRT 480  
 DB 421 VKPQQLLENNYNTLTFHVGGPLRFDSSGNVMEYDLKLMWQGSVPRLHDVGRFNGSLRT 480

Qy 481 ERLKIRMTSDNOKPVSRCSCQCEGOVRRVKGFSHCYDCEVDCBAGSYRONPDDIACTF 540  
| | | | |  
Db 481 ERLKIRMTSDNOKPVSRCSCQCEGOVRRVKGFSHCYDCEVDCBAGSYRONPDDIACTF 540  
Qy 541 CGODEMSPERSTRCFRRRSRFLAMGEPAYLLILLSTALGLVLAALGFVHHRDSPLVQ 600  
| | | | |  
Db 541 CGODEMSPERSTRCFRRRSRFLAMGEPAYLLILLSTALGLVLAALGFVHHRDSPLVQ 600  
Qy 601 ASGGPLACFGVLCGLVCLSVLLFPQSPSPARCIAQOPLSHLPLTGCLSTLFLQAAELFV 660  
| | | | |  
Db 601 ASGGPLACFGVLCGLVCLSVLLFPQSPSPARCIAQOPLSHLPLTGCLSTLFLQAAELFV 660  
Qy 661 ESELPLSMADRLSGCLRGPMAMLVLLMLVEVALCTWYLAFPPEVVTDMHMLPTBALV 720  
| | | | |  
Db 661 ESELPLSMADRLSGCLRGPMAMLVLLMLVEVALCTWYLAFPPEVVTDMHMLPTBALV 720  
Qy 721 HCRTRSWVSFGIAAHATNATLAFLCFLGTFLVRSQPCYNRARGLTFMAMLAFTITWSEVP 780  
| | | | |  
Db 721 HCRTRSWVSFGIAAHATNATLAFLCFLGTFLVRSQPCYNRARGLTFMAMLAFTITWSEVP 780  
Qy 781 LLANQVVLBPAYOMGALLLCVIGITLAAFHLPRCYLLMRQPLANTPEFFLGSGPDAGQ 840  
| | | | |  
Db 781 LLANQVVLBPAYOMGALLLCVIGITLAAFHLPRCYLLMRQPLANTPEFFLGSGPDAGQ 840  
Qy 841 NDGNTGNQKHE 852  
| | | | |  
Db 841 NDGNTGNQKHE 852

RESULT 14  
US-09-799-629-4  
; Sequence 4, Application US/09799629  
; Publication No. US20030008344A1

; GENERAL INFORMATION:  
; APPLICANT: ADLER, JON ELIOT  
; APPLICANT: ZOZULYA, SERGEY  
; APPLICANT: LI, XIADONG  
; APPLICANT: O'CONNELL, SHAM  
; APPLICANT: STASZEWSKI, LENA  
; TITLE OF INVENTION: TIR TASTE RECEPTORS AND GENES ENCODING SAME  
; FILE REFERENCE: 078003/027870/RXT  
; CURRENT APPLICATION NUMBER: US/09/799,629  
; PRIOR FILING DATE: 2001-03-07  
; PRIOR APPLICATION NUMBER: 60/187,546  
; PRIOR FILING DATE: 2000-03-07  
; PRIOR APPLICATION NUMBER: 60/195,536  
; PRIOR FILING DATE: 2000-04-07  
; PRIOR APPLICATION NUMBER: 60/209,840  
; PRIOR FILING DATE: 2000-06-06  
; PRIOR APPLICATION NUMBER: 60/214,213  
; PRIOR FILING DATE: 2000-06-23  
; PRIOR APPLICATION NUMBER: 60/226,448  
; PRIOR FILING DATE: 2000-08-17  
; PRIOR APPLICATION NUMBER: 60/259,227  
; PRIOR FILING DATE: 2001-01-03  
; NUMBER OF SEQ ID NOS: 20  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4  
; LENGTH: 850  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-799-629-4

Query Match 99.5%; Score 4500; DB 10; Length 850;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 849; Conservative 0; Mismatches 1; Indels 2; Gaps 1;  
Qy 1 MLGPVVLGLSLMALHPGTGAPLCLSQQLRMKGDVVLGCLPFLGAEAGAGLSRRTRPSP 60  
| | | | |  
Db 1 MLGPVVLGLSLMALHPGTGAPLCLSQQLRMKGDVVLGCLPFLGAEAGAGLSRRTRPSP 60  
| | | | |  
Qy 61 VCTRFSSNGLLMALMKAAVEEINNKSDLLPGLRLGYDLFDTCSPEPVAMKPSLMFLAKA 120  
| | | | |

Db 61 VCTRFSSNGLLMALMKAAVEEINNKSDLLPGLRLGYDLFDTCSPEPVAMKPSLMFLAKA 120  
| | | | |  
Qy 121 GSRDIAAYCNVTOYOPRLAVIIGHSESLAMVTGKFPSPFLMPQSVSGASWELLSARETF 180  
| | | | |  
Db 121 GSRDIAAYCNVTOYOPRLAVIIGHSESLAMVTGKFPSPFLMPH- YGASWELLSARETF 178  
| | | | |  
Qy 181 PSFRTVPSRVOVLTAAAEILQEFGMWVAALGSDDEYSGRGISIFSALAAARGICIAHE 240  
| | | | |  
Db 179 PSFRTVPSRVOVLTAAAEILQEFGMWVAALGSDDEYSGRGISIFSALAAARGICIAHE 238  
| | | | |  
Qy 241 GLVPLPRADSRRLKQVDVHQNQSSVOYVLLPASVAAHALFNYSISSRLSPKVVAS 300  
| | | | |  
Db 239 GLVPLPRADSRRLKQVDVHQNQSSVOYVLLPASVAAHALFNYSISSRLSPKVVAS 298  
| | | | |  
Qy 301 EAMLTSLVMGLPQMAQMGTVLGFLOGAOLHEPQYVKTHLATATPAFCALSAGEEOG 360  
| | | | |  
Db 299 EAMLTSLVMGLPQMAQMGTVLGFLOGAOLHEPQYVKTHLATATPAFCALSAGEEOG 358  
| | | | |  
Qy 361 LEBDVQORCPQDCITLQNVSAGLNHRQTFSSVAAVYAQALHNTLQCNASGCPADP 420  
| | | | |  
Db 359 LEBDVQORCPQDCITLQNVSAGLNHRQTFSSVAAVYAQALHNTLQCNASGCPADP 418  
| | | | |  
Qy 421 VKPWQLLENNYNTLTFHYGLPLRFDSGSQNDMEYDLKLMWQGSVPRLHDVGRNGSLRT 480  
| | | | |  
Db 419 VKPWQLLENNYNTLTFHYGLPLRFDSGSQNDMEYDLKLMWQGSVPRLHDVGRNGSLRT 478  
| | | | |  
Qy 481 ERLKIRMTSDNOKPVSRCSCQCEGOVRRVKGFSHCYDCEVDCBAGSYRONPDDIACTF 540  
| | | | |  
Db 479 ERLKIRMTSDNOKPVSRCSCQCEGOVRRVKGFSHCYDCEVDCBAGSYRONPDDIACTF 538  
| | | | |  
Qy 541 CGODEMSPERSTRCFRRRSRFLAMGEPAYLLILLSTALGLVLAALGFVHHRDSPLVQ 600  
| | | | |  
Db 539 CGODEMSPERSTRCFRRRSRFLAMGEPAYLLILLSTALGLVLAALGFVHHRDSPLVQ 598  
| | | | |  
Qy 601 ASGGPLACFGVLCGLVCLSVLLFPQSPSPARCIAQOPLSHLPLTGCLSTLFLQAAELFV 660  
| | | | |  
Db 599 ASGGPLACFGVLCGLVCLSVLLFPQSPSPARCIAQOPLSHLPLTGCLSTLFLQAAELFV 658  
| | | | |  
Qy 661 ESELPLSMADRLSGCLRGPMAMLVLLMLVEVALCTWYLAFPPEVVTDMHMLPTBALV 720  
| | | | |  
Db 659 ESELPLSMADRLSGCLRGPMAMLVLLMLVEVALCTWYLAFPPEVVTDMHMLPTBALV 718  
| | | | |  
Qy 721 HCRTRSWVSFGIAAHATNATLAFLCFLGTFLVRSQPCYNRARGLTFMAMLAFTITWSEVP 780  
| | | | |  
Db 719 HCRTRSWVSFGIAAHATNATLAFLCFLGTFLVRSQPCYNRARGLTFMAMLAFTITWSEVP 778  
| | | | |  
Qy 781 LLANQVVLBPAYOMGALLLCVIGITLAAFHLPRCYLLMRQPLANTPEFFLGSGPDAGQ 840  
| | | | |  
Db 779 LLANQVVLBPAYOMGALLLCVIGITLAAFHLPRCYLLMRQPLANTPEFFLGSGPDAGQ 838  
| | | | |  
Qy 841 NDGNTGNQKHE 852  
| | | | |  
Db 839 NDGNTGNQKHE 850

RESULT 15  
US-10-190-417-30  
; Sequence 30, Application US/10190417  
; Publication No. US20030166137A1  
; GENERAL INFORMATION:  
; APPLICANT: Zuker, Charles S.  
; APPLICANT: Ryba, Nicholas J. P.  
; APPLICANT: Chandrasekar, Jayaram  
; APPLICANT: Hoon, Mark A.  
; APPLICANT: Nelson, Greg  
; APPLICANT: Zhang, Yifeng  
; APPLICANT: The Regents of the University of California  
; APPLICANT: The Government of the United States of America  
; APPLICANT: as represented by the Secretary of the  
; TITLE OF INVENTION: Department of Health and Human Services  
; TITLE OF INVENTION: Mammalian Sweet and Amino Acid Heterodimeric Taste  
; FILE REFERENCE: 02307E-120130US

1 CURRENT APPLICATION NUMBER: US/10/190,417  
1 CURRENT FILING DATE: 2002-11-14  
1 PRIOR APPLICATION NUMBER: US 60/302,898  
1 PRIOR FILING DATE: 2001-07-03  
1 PRIOR APPLICATION NUMBER: US 09/927,315  
1 PRIOR FILING DATE: 2001-08-10  
1 PRIOR APPLICATION NUMBER: US 60/358,925  
1 PRIOR FILING DATE: 2002-02-22  
1 NUMBER OF SEQ ID NOS: 30  
1 SOFTWARE: Patent In Ver. 2.1  
1 SEQ ID NO 30  
1 LENGTH: 850  
1 TYPE: PRT  
1 ORGANISM: Homo sapiens  
1 FEATURE:  
1 OTHER INFORMATION: human TIR3  
1 US-10-190-417-30

Query Match 99.5%; Score 4500; DB 14; Length 850;  
Best Local Similarity 99.6%; Pred. No. 0;  
Matches 849; Conservative 0; Mismatches 1; Indels 2; Gaps 1;

QY 1 MGGPVLGSLMALHPGTGAPLCTSQQLRMKGDIYLGGLFPLGAEAEAGLRSTRPSSP 60  
DB 1 MGGPVLGSLMALHPGTGAPLCTSQQLRMKGDIYLGGLFPLGAEAEAGLRSTRPSSP 60  
QY 61 VCTRESSNGLMALMKAAVEEINKSDLLPGLRLGYDLFDTCSEPPVAMKPSLMFLAKA 120  
DB 61 VCTRESSNGLMALMKAAVEEINKSDLLPGLRLGYDLFDTCSEPPVAMKPSLMFLAKA 120  
QY 121 GSRDIAAYCNYQYOPRYLAIVGPHSSELAWTGKFFSFPLMPQVSYGASMEELISARETF 180  
DB 121 GSRDIAAYCNYQYOPRYLAIVGPHSSELAWTGKFFSFPLMPH--YGASMEELISARETF 178  
QY 181 PSFFRTVPSDRVQLTAAAEELLQEFGMNVAALGSDDEYGRQGLSIFSAALAAARGICIAHE 240  
DB 179 PSFFRTVPSDRVQLTAAAEELLQEFGMNVAALGSDDEYGRQGLSIFSAALAAARGICIAHE 238  
QY 241 GLVPLPRADDSRLGVQDVLHOVNOSVQVLLFASVHAHAALFNYSISSRLSPKMWAS 300  
DB 239 GLVPLPRADDSRLGVQDVLHOVNOSVQVLLFASVHAHAALFNYSISSRLSPKMWAS 298  
QY 301 EAMLTSDLYMGLPGNAQMGTVLGFLOGAQLHEFPQYKTHLALATDPAFCALGEREOG 360  
DB 299 EAMLTSDLYMGLPGNAQMGTVLGFLOGAQLHEFPQYKTHLALATDPAFCALGEREOG 358  
QY 361 LEEDEVGRCPCQDCITLQNVSAAGLHHQTESVVAAYVSAQALHNTLQCNASGCCPADP 420  
DB 359 LEEDEVGRCPCQDCITLQNVSAAGLHHQTESVVAAYVSAQALHNTLQCNASGCCPADP 418  
QY 421 VKPMQLLENMNLTHVGGPLRFPSGSGVNDMEYDLKLMWQGSVPRLHDVGRENGSLRT 480  
DB 419 VKPMQLLENMNLTHVGGPLRFPSGSGVNDMEYDLKLMWQGSVPRLHDVGRENGSLRT 478  
QY 481 ERLKIRMTSDNQKFEVSRCSRCOCQGOVRYVKGFHSCCYDCVDCAGSRYRONPDDIACTF 540  
DB 479 ERLKIRMTSDNQKFEVSRCSRCOCQGOVRYVKGFHSCCYDCVDCAGSRYRONPDDIACTF 538  
QY 541 CGODEMSPERSTRCFRRRSRFLAWGEPAYLILLILLISLALGLVLAALGLFVHHRDSPLVQ 600  
DB 539 CGODEMSPERSTRCFRRRSRFLAWGEPAYLILLILLISLALGLVLAALGLFVHHRDSPLVQ 598  
QY 601 ASGGPLACFGLVCLVCLSVLLFPGQSPAPACLAQQPLSHPLTGCLSTLFLQAAEIFV 660  
DB 599 ASGGPLACFGLVCLVCLSVLLFPGQSPAPACLAQQPLSHPLTGCLSTLFLQAAEIFV 658  
QY 661 ESELPLSWADRLSGCLRGFWAMLVYLAMLVEVALCTWLVAFPEVVYTDHMLPTBALV 720  
DB 659 ESELPLSWADRLSGCLRGFWAMLVYLAMLVEVALCTWLVAFPEVVYTDHMLPTBALV 718  
QY 721 HCRTRSWVSGLAHAATNATLAFCLGLFLVRSQPCYNRARGLTFAMLAIFYITWVSFVP 780  
DB 719 HCRTRSWVSGLAHAATNATLAFCLGLFLVRSQPCYNRARGLTFAMLAIFYITWVSFVP 778

QY 781 LLANQVVLRPAVQWGAALLCIVLGIILAAFHLPKCYLMMROPGNLTPPEFFLGSGPDAGQ 840  
DB 779 LLANQVVLRPAVQWGAALLCIVLGIILAAFHLPKCYLMMROPGNLTPPEFFLGSGPDAGQ 838  
QY 841 NDGNTNGKXHE 852  
DB 839 NDGNTNGKXHE 850

Search completed: May 11, 2004, 15:38:56  
Job time : 44.3396 secs

**THIS PAGE BLANK (USPTO)**

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 11, 2004, 15:24:27 ; Search time 19.1574 Seconds  
(without alignments)  
2235.997 Million cell updates/sec

Title: US-09-927-315-15

Perfect score: 4524

Sequence: 1 MLGPVAVLGSLMALHPGNG.....GPGDAQGNQDNTGNQKHE 852

Scoring table:

BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Issued Patents AA:

1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*  
2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/PCCTS.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1089.5	24.1	1059	3	US-09-134-513-2
2	1068.5	23.6	1078	1	US-08-485-588-7
3	1068.5	23.6	1078	1	US-08-484-565-7
4	1068.5	23.6	1078	2	US-08-943-985-7
5	1068.5	23.6	1078	2	US-08-943-985-7
6	1068.5	23.6	1078	3	US-08-353-784-7
7	1068.5	23.6	1078	3	US-08-484-7198-7
8	1068.5	23.6	1078	4	US-08-484-159-7
9	1068.5	23.6	1078	4	US-08-485-588-5
10	1060	23.4	1085	1	US-08-484-565-5
11	1060	23.4	1085	2	US-08-480-751-5
12	1060	23.4	1085	2	US-08-943-986-5
13	1060	23.4	1085	2	US-08-353-784-5
14	1060	23.4	1085	3	US-08-484-7198-5
15	1060	23.4	1085	4	US-08-484-159-5
16	1057.5	23.4	1088	1	US-08-485-588-6
17	1057.5	23.4	1088	1	US-08-484-565-6
18	1057.5	23.4	1088	2	US-08-480-751-6
19	1057.5	23.4	1088	2	US-08-943-986-6
20	1057.5	23.4	1088	3	US-08-353-784-6
21	1057.5	23.4	1088	3	US-08-484-7198-6
22	1057.5	23.4	1088	4	US-08-484-159-6
23	1056	23.3	1027	4	US-09-162-021B-2
24	1054	23.3	1079	1	US-08-485-588-8
25	1054	23.3	1079	1	US-08-484-565-8
26	1054	23.3	1079	2	US-08-480-751-8
27	1054	23.3	1079	2	US-08-943-986-8

28	1054	23.3	1079	3	US-08-353-784-8	Sequence 8, Appli
29	1054	23.3	1079	3	US-08-484-7198-8	Sequence 8, Appli
30	1054	23.3	1079	4	US-08-484-159-8	Sequence 8, Appli
31	1009.5	22.3	877	4	US-09-619-353-2	Sequence 2, Appli
32	1002.5	22.2	843	4	US-09-361-631-1	Sequence 1, Appli
33	999.5	22.1	843	4	US-09-361-631-2	Sequence 2, Appli
34	974	21.5	863	4	US-09-619-353-14	Sequence 14, Appli
35	938.5	20.7	1219	2	US-08-687-289A-6	Sequence 6, Appli
36	938.5	20.7	1219	4	US-09-435-887-6	Sequence 6, Appli
37	938	20.7	975	4	US-09-695-481-4	Sequence 4, Appli
38	839	18.5	835	4	US-09-619-353-7	Sequence 7, Appli
39	788.5	17.4	851	4	US-09-619-353-12	Sequence 12, Appli
40	787	17.4	856	4	US-09-619-353-8	Sequence 8, Appli
41	781	17.3	854	4	US-09-619-353-10	Sequence 10, Appli
42	756	16.7	669	4	US-09-361-631-7	Sequence 7, Appli
43	683.5	15.1	1058	2	US-08-687-289A-5	Sequence 5, Appli
44	683.5	15.1	1058	4	US-09-435-887-5	Sequence 5, Appli
45	672.5	14.9	872	3	US-08-337-797A-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1  
US-09-134-513-2  
; Sequence 2, Application US/09134513  
; Patent No. 6210964  
; GENERAL INFORMATION:  
; APPLICANT: Brown, Edward M.  
; APPLICANT: Diaz, Ruben  
; APPLICANT: Bai, Mei  
; APPLICANT: Quinn, Stephen J.  
; TITLE OF INVENTION: The Avian Extracellular Calcium-Sensing  
; NUMBER OF INVENTIONS: 2  
; TITLE OF INVENTION: Receptor  
; NUMBER OF SEQUENCES: 2  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Vinson & Elkins L.L.P.  
; STREET: 1455 Pennsylvania Avenue, N.W.  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: U.S.  
; ZIP: 20004-1008  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/134,513  
; FILING DATE:  
; CLASSIFICATION:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Sanzo, Michael A.  
; REGISTRATION NUMBER: 36,912  
; REFERENCE/DOCKET NUMBER: BR1331/13003  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202)639-6585  
; TELEFAX: (202)639-6604  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1059 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: not relevant  
; TOPOLOGY: not relevant  
; MOLECULE TYPE: protein  
; HYPOTHEICAL: NO  
; US-09-134-513-2  
Query Match 24.1%, Score 1089.5, DB 3, Length 1059,  
Best Local Similarity 30.4%, Pred. No. 2.4e-95,  
Matches 266; Conservative 157; Mismatches 350; Indels 103; Gaps 23;  
QY 26 SQLRMKDYVIGGIPLG---EAEFAGLRRTPTSPSVCTRFPSNGILMALMKMAVEE 82

[illegible]

RESULT 2  
US-08-485-568-7  
Sequence 7, Application US/0848558  
Patent No. 5688938  
GENERAL INFORMATION:  
APPLICANT: Edward M. Brown  
APPLICANT: Steven C. Hebert  
APPLICANT: Forrest H. Fuller  
APPLICANT: James E. Garrett, Jr.  
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
MOLECULES  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:

```

ADDRESSSEE: Lyon & Lyon
STREET: First Interstate World Center
STREET: Suite 4700
STREET: 633 West Fifth Street
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90071
COMPUTER READEABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: FASTSEQ
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,588
FILING DATE: 7 June, 1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below: 9
APPLICATION NUMBER: 08/353,784
FILING DATE: 9 December, 1994
APPLICATION NUMBER: PCT/US/94/12117
FILING DATE: 21 October, 1994
APPLICATION NUMBER: U.S. 08/292,827
FILING DATE: 23 August, 1994
APPLICATION NUMBER: U.S. 08/141,248
FILING DATE: 22 October, 1993
APPLICATION NUMBER: U.S. 08/009,389
FILING DATE: 23 February, 1993
APPLICATION NUMBER: U.S. 08/017,127
FILING DATE: 12 February, 1993
APPLICATION NUMBER: U.S. 07/934,161
FILING DATE: 21 August, 1992
APPLICATION NUMBER: U.S. 07/834,044
FILING DATE: 11 February, 1992
APPLICATION NUMBER: U.S. 07/749,451
FILING DATE: 23 August, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Heber, Sheldon O
REGISTRATION NUMBER: 38,179
REFERENCE/DOCKET NUMBER: 213/005
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 1078 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-485-588-7

Query Match      23.6%; Score 1068.5; DB 1; Length 1078;
Best Local Similarity   30.3%; Pred. No. 2,6e-93;
Matches    269; Conservative 156; Mismatches 366; Indels   97; Gaps   26

      12 WALL-----HPTGAPLCLISQGLRMKGDVYLGLFPFG--BAEAGLRSRTRPPSPVCTR 64
          |||               : : | : ||||| :
Db       8 WVLLALTWHTSAYGP---DQRAOKKGDDIILGLGFPIHGVAKKODDKS--RPESVEICR 62
          ::|||           ||| : ||| : ||| : ||| : | : : : ||| :
Oy       65 FSSNGILLMALMKWAVERENNKSDLLPELRIGYDLFDTCSEPRVAMKPSLMFLA--KAGS 122
          ::|||           ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Db       63 YNPGFRRLQMPITPAIEEINSSPALPLTLGYRIPTDCNVSVSKALENTLSFVAONKIDS 122
          ::|||           ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Oy       123 RDIAYACVTYOOPRVLAIVIPHSSESLAMTVGKFSSFFIMPOVSYGASMEILSAETEPS 182
          ::|||           ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Db       123 LNDLFPCNCSHIRISTIAVATGSQVSTAANLLGLFYLIQVGVYASSSRLLSNKNQPKS 182
          ::|||           ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Oy       183 FFRTVPDSRYVLTAAAEIILOEGFNWVAALGSDDEYGRQGLSTFSALAAAGICTAHBGL 242
          ::|||           ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :
Db       183 FLRTIPNDHOATMAADIEEFRRNNWGTTIAADDYGRPGTKEFEAEAEEDICIDFSEL 242
          ::|||           ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :

```

```

QY 243 VPLPRADSRGLKQVODVHLQVNOSSVOYVLLFPASVHAHAHLFNYSISSRLSPKMWASRA 302
DB 243 I-----SQSDEBEIQHVEVIONSTAKIVVSSGDPLEPLKEIYRNRITGKIWLASBA 298
QY 303 WLTSDLVNGLPGMAQMGTVLGLORGAQLHEFPQVY-KTHLALATDPAFCALGERE--- 358
DB 299 WASSSLIAMPQYFHVVGITIGFALKAGQIGFREPLKXVHPKRSVHNGFAKFWETPNC 358
QY 359 -----QGLEEDVVGORCPQCD-----CITLQNVSA-----GLNHQ- 389
DB 359 HLOEGAKGRLPYDTFLRGHEES--GDRFSNSSTAFRLCTGDENISSVETPYIDYTHLRI 416
QY 390 TFSVYAAYSVVAQALHNTLQ-----NASGCPADQVPRKMOLENNYULTF-HVGL 440
DB 417 STNVLYAVSIHAADITYTCLPRGRLTNGS-CADIKVEAMQVKKHLHLNFTNNKE 475
QY 441 PLRFDSSGNVMEYDLKLM---VMQGSVPLHDVGRFN-GSLRTERL-----KIRWTS 491
DB 476 QVTFECGDLVGNYSIINHLSPEDSIV-FKEVGYNYAKGERLFINEEKILMSGS 534
QY 442 NOKPVSRGROCEQVRR-VGFHSCCYDVCDEAGSYRONPDDIACFCQDEWSPER 550
DB 535 REVPSNCSRDCLAGTRKGIIEGEPCECEVCEPDGEYSDETDASACNKCDDDFWSEN 594
QY 551 STRCRRRRRFLANGEPALVLLLLLSLALGLVLAALGLFVHHRSPVLYQASGRLA--- 607
DB 595 HTSCIAKEIEFLSWTEPGIALTLPAVLGIFLTAFLVGLFIFKRPMPYKATNRRLSYLL 654
QY 608 CFGVLCGLVCL-SVLLFPQSPARCLAQPLSHLPLTGCLSTFLQAAEIFV--ESEL 664
DB 655 LFSLLC---CFSSSLFFIGEPQDMTCRARGAFGSLFCLCSILVKNRVLVFEAKI 710
QY 665 PLS-----WADRLSGCLRGPMALVLLMLVEVALCTMYLVAPEPVVTDNMLPTEAL 719
DB 711 PTFPRKMWGLNLQ-----FLVFLCTFMQIVICVIMLYTAPSSYRNDELDELIF 762
QY 720 VHCRRRSWSPGLAATNTATLAFCLGELVRSQGCNRRAGLTFMALAFITMVSPV 779
DB 763 ITCHEGSLMALGFLIGYTCLLAICFPFAKSRKLPENNEKFTTSPVLIWISPI 822
QY 780 PLLANVQVLRPAVQMGALLLCVLLGILAFHLPRLVLMRQGLNTPR 827
DB 823 PAYASTYGVSAVEVIALIILASFGLLACIFPNKIYIILFKPSRNTIE 870

```

## RESULT 3

```

US-08-484-565-7
; Sequence 7, Application US/08484565
; Patent No. 5763569
; GENERAL INFORMATION:
; APPLICANT: Edward M. Brown
; APPLICANT: Steven C. Hebert
; APPLICANT: James B. Hebert, Jr.
; TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE
; NUMBER OF SEQUENCES: 20
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: First Interstate World Center
; STREET: Suite 4700
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90071
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: FASTSEQ
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/484,565

```

```

; FILING DATE: 7 June, 1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA: including application
; PRIOR APPLICATION DATA: described below: 9
; APPLICATION NUMBER: 08/353,784
; FILING DATE: 9 December, 1994
; APPLICATION NUMBER: PCT/US/94/12117
; FILING DATE: 21 October, 1994
; APPLICATION NUMBER: U.S. 08/292,827
; FILING DATE: 23 August, 1994
; APPLICATION NUMBER: U.S. 08/141,248
; FILING DATE: 22 October, 1993
; APPLICATION NUMBER: U.S. 08/009,389
; FILING DATE: 23 February, 1993
; APPLICATION NUMBER: U.S. 08/017,127
; FILING DATE: 12 February, 1993
; APPLICATION NUMBER: U.S. 07/934,161
; FILING DATE: 21 August, 1992
; APPLICATION NUMBER: U.S. 07/834,044
; FILING DATE: 11 February, 1992
; APPLICATION NUMBER: U.S. 07/749,451
; FILING DATE: 23 August, 1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Heber, Sheldon O.
; REGISTRATION NUMBER: 38,179
; REFERENCE/DOCKET NUMBER: 213/006
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO. 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1078 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-484-565-7

```

Query Match 23.6%; Score 1068.5; DB 1; Length 1078;  
Best Local Similarity 30.3%; Pred. No. 2.6e-93;  
Matches 269; Conservative 156; Mismatches 366; Indels 97; Gaps 26;

```

QY 12 WALL-----HPTGAPLCSQOLRMKGIVYLGSLPGLG--EAEELGLSRTPSPVCTR 64
DB 8 WLLALTLWHTSAYGP---DORAOKKGDITILGLFPIHGVAKDODLS--RPSEVECTR 62
QY 65 FSSNGLWALMKVAVERINKKSDLLPGLRLGYDLFDCSEPVVMKPSIMPLA--KAGS 122
DB 63 YNFRGFRLOAVITFAIBESINSPALLPVLTVGRILFTCNVSVKALENTLSFVAONKIDS 122
QY 123 RDIAYCNVTOYOPRVLAVIGPHSSELMVTKGFPFLMPQVSVGASMEILSARETPS 182
DB 123 LNLDFCNCHSEIPISTIAVVGATGSGVSTAVANILGLFYIIPQVSYASSRLLSNQNFRS 182
QY 183 FFRVPSRVLQTLAAELLOEFQKMWVALASDDDEYRGQGISIFSALAAAGICIAHECL 242
DB 183 FLRTIPNDEHQATMAADIIIEFRNMWVGITIAADDYGRGIEKFEBAEBERDICI 242
QY 243 VPLPRADSRGLKQVODVHLQVNOSSVOYVLLFPASVHAHAHLFNYSISSRLSPKMWASRA 302
DB 243 I-----SQSDEBEIQHVEVIONSTAKIVVSSGDPLEPLKEIYRNRITGKIWLASBA 298
QY 303 WLTSDLVNGLPGMAQMGTVLGLORGAQLHEFPQVY-KTHLALATDPAFCALGERE--- 358
DB 299 WASSSLIAMPQYFHVVGITIGFALKAGQIGFREPLKXVHPKRSVHNGFAKFWETPNC 358
QY 359 -----QGLEEDVVGORCPQCD-----CITLQNVSA-----GLNHQ- 389
DB 359 HLOEGAKGRLPYDTFLRGHEES--GDRFSNSSTAFRLCTGDENISSVETPYIDYTHLRI 416
QY 390 TFSVYAAYSVVAQALHNTLQ-----NASGCPADQVPRKMOLENNYULTF-HVGL 440

```

Db 417 SYNVTYLAAYSAHAALQDIYTCLPGRGLFTNGS-CADIKKVEAMQV/LKHLRHLNFTNNNGE 475  
Qy 441 PLRFDSSGNVDMEDYDLKLM---VMQGSVPRLLDVGFRN-GSLRTERL-----KIRMTSD 491  
Db 476 QVTFDECGDLVGNYSIIIMHLSPEBGISIV-FKEVGYNVYAKGRLFTINEKILMSGFS 534  
Qy 492 NOKPVSRCSROCEQGVRR-VKGFHSCCYDCVDCBAGSYRQNPDDIACFCQODEWSPER 550  
Db 535 REVFPNSCSRDCIATGRKGIIEGEPITCCFCEVCEDGEXSDETDASACNKCPCDDPMNEN 594  
Qy 551 STRCFRRSRPLAWGEPAVLLLLLSLALGLVLAALGFVHHRSPLVQASGGFLA--- 607  
Db 595 HTSCIAKEIFLWTEPFGIALTLFAVIGIFLTAFLVGFIFKFRNPTV/KANRELSTYL 654  
Qy 608 CFGVLGLGLVCL-SVLLFPQGPSPARCLAQCPLSHLPLTGCLSTFLQAAEFV--ESEL 664  
Db 655 LPSLLC-----CFSSSLPFIQEPQDMTCRLRQAPGISFPLCLISCLVATNRYLVLEAKI 710  
Qy 665 PLS-----WADRLSGCLRGPMAMLVLLAMLVEVALCTWYLVAFPEVVTDMHMLPTBAL 719  
Db 711 PTFRKMWMGLNLQ-----FLVPLCTFMQIVICVIMLYTADPSSYRQLEDELIIF 762  
Qy 720 VHCRRSRVSPGLAATNATLAF/LCFLGTFVLRSPQGCYNRARGLTFMAMVFTWSEFV 779  
Db 763 ITCHGSLMALGFLIGYTCLLAAICFPFAFKSRKLPENFNEAKFTTFMILFFIWMISFI 822  
Qy 760 PLANVQVVLPRAYOMGALLC/LGILAAFHLPRCYLMLRQGLNTPPE 827  
Db 823 PAYASTYKFSVAVEVIAI/LAASFGLLACIFPNKIIYILFKRSRTIE 870

RESULT 4  
US-08-480-751-7  
Sequence 7, Application US/08480751

GENERAL INFORMATION:  
APPLICANT: Edward F. Nemeth  
APPLICANT: Edward M. Brown  
APPLICANT: Steven C. Hebert  
APPLICANT: Forrest H. Fuller  
APPLICANT: James E. Garrett, Jr.  
TITLE OF INVENTION: CALCULON RECEPTOR-ACTIVE  
TITLE OF INVENTION: MOLECULES  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: First Interstate World Center  
STREET: Suite 4700  
STREET: 633 West Fifth Street  
CITY: Los Angeles  
STATE: California  
COUNTRY: USA  
ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PASTSEQ  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/480,751  
FILING DATE: 7 June, 1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
PRIOR APPLICATION DATA: including application  
APPLICATION NUMBER: 08/353,784  
FILING DATE: 9 December, 1994  
APPLICATION NUMBER: PCT/US/94/12117  
FILING DATE: 21 October, 1994  
APPLICATION NUMBER: U.S. 08/292,827  
FILING DATE: 23 August, 1994  
APPLICATION NUMBER: U.S. 08/141,248  
FILING DATE: 22 October, 1993

APPLICATION NUMBER: U.S. 08/009,389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017,127  
FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 21 August, 1992  
APPLICATION NUMBER: U.S. 07/834,044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749,451  
FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Heber, Sheldon O.  
REGISTRATION NUMBER: 38,179  
REFERENCE/DOCKET NUMBER: 213/004  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1078 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-480-751-7  
Query Match 23.6%; Score 1068.5; DB 2; Length 1078;  
Best Local Similarity 30.3%; Pred. No. 2.6e-93;  
Matches 269; Conservative 156; Mismatches 366; Indels 97; Gaps 26;  
Qy 12 WALL-----HPGTGAPLCLSQQLRMKGDIYLGGLFPLG---EABEAGLSRTRPSPVCTR 64  
Db 8 WVLLALTFMHTSAYGP---DQRAQKKGDIIILGGLPPIHFGVAAKQODLS--RPSVACIR 62  
Qy 65 PSSNGLMLALAMKRAVAEINKSDLLPGLNLGDLPTTCGSEPVYAMKPSLMFLA--KAGS 122  
Db 63 YNFRGFPMLOAMFALIEINSSPALLPNLT/LGRIIFPTCTVSKALATLSFVAQNTIDS 122  
Qy 123 RDIAYCNYQOYPRVLAIVGPHSSELMATYGFSEFLMPOVSYGASMETLSARETFPS 182  
Db 123 LNLDFCNCSEHPISTIAVVGATGSGVSTAVANILGLFYIPQVSYASSRLSKNOFKS 182  
Qy 183 FFRTPSDRVQ/LTAAELIQEFQGNWVAALGSDDEYRGQLSIFSAALAAAGICIAEGL 242  
Db 183 FLRTIPDEHQATMADIIIEYFRNWNVGTIAADDDYRPGIEKREABERDICTDPSL 242  
Qy 243 VPLPRADSR/LGKYQDVLHQVNOSSVOYVLLFASVHAHALFVNSISRLSPKVVASEA 302  
Db 243 I---SQYSDDEEIQHVVEVIONSTAKVIVFSSGPDLEPLIKEIVRNITGKIWLASEA 298  
Qy 303 WLTSDLVMGLPGMAQMGTVLGF/LQRGALHEFPQVY-KTHLALATDPAFSAUGERE--- 358  
Db 299 WASSSLIAMPQYFHVVGCTIGFALKAGQIIPGFRLKVRHPRKSVHNGFAKEMEEFTFNC 358  
Qy 359 -----GLEBEDVVGRCPOCD-----CITLQNVSA-----GLNHHQ- 389  
Db 359 HLQGAAGPLPYDTFLRKGHESS--GDRFNSSTAFRLTCGDENISSVEMPYIDYTLRI 416  
Qy 390 TFSVYAAVSYVAQALNHTLOC-----NASGCPADPVKPMQLENNYNTLF-HVGL 440  
Db 417 SYNVTYLAAYSAHAALQDIYTCLPGRGLFTNGS-CADIKKVEAMQV/LKHLRHLNFTNNNGE 475  
Qy 441 PLRFDSSGNVDMEDYDLKLM---VMQGSVPRLLDVGFRN-GSLRTERL-----KIRMTSD 491  
Db 476 QVTFDECGDLVGNYSIIIMHLSPEBGISIV-FKEVGYNVYAKGRLFTINEKILMSGFS 534  
Qy 492 NOKPVSRCSROCEQGVRR-VKGFHSCCYDCVDCBAGSYRQNPDDIACFCQODEWSPER 550  
Db 535 REVFPNSCSRDCIATGRKGIIEGEPITCCFCEVCEDGEXSDETDASACNKCPCDDPMNEN 594  
Qy 551 STRCFRRSRPLAWGEPAVLLLLLSLALGLVLAALGFVHHRSPLVQASGGFLA--- 607  
Db 595 HTSCIAKEIFLWTEPFGIALTLFAVIGIFLTAFLVGFIFKFRNPTV/KANRELSTYL 654





```

; TITLE OF INVENTION: MOLECULES
; NUMBER OF SEQUENCES: 20
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: First Interstate World Center
; STREET: Suite 4700
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90071
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: MS Word
; SOFTWARE: FastSeq for Windows Version 3.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/484,719B
; FILING DATE: 7 June, 1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/353,784
; FILING DATE: 9 December, 1994
; APPLICATION NUMBER: PCT/US/94/12117
; FILING DATE: 21 October, 1994
; APPLICATION NUMBER: U.S. 08/292,827
; FILING DATE: 23 August, 1994
; APPLICATION NUMBER: U.S. 08/141,248
; FILING DATE: 22 October, 1993
; APPLICATION NUMBER: U.S. 08/009,389
; FILING DATE: 23 February, 1993
; APPLICATION NUMBER: U.S. 08/017,127
; FILING DATE: 12 February, 1993
; APPLICATION NUMBER: U.S. 07/934,161
; FILING DATE: 21 August, 1992
; APPLICATION NUMBER: U.S. 07/834,044
; FILING DATE: 11 February, 1992
; APPLICATION NUMBER: U.S. 07/749,451
; FILING DATE: 23 August, 1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Douglas C. Murdock
; REGISTRATION NUMBER: 37,549
; REFERENCE/DOCKET NUMBER: 213/007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1078 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-484-719B-7.

```

Query Match 23.6%; Score 1068.5; DB 3; Length 1078;  
 Best Local Similarity 30.3%; Pred. No. 2.6e-93;  
 Matches 269; Conservative 156; Mismatches 366; Indels 97; Gaps 26;

```

QY 12 WALL-----HPTGALCLSCQDRMGDYLGLPLUG---EAEAGLSTRTPSSPVCTR 64
DB 8 WLLALLTMTHTAYGP---DQRAQKGDILLGLGFLIHGVAKDODLKS--RPESVECLR 62
QY 65 FSSNGLLWALAKMAVEEINNKSDLLPGILGGLFDITCEBPVAMKPSIMFLA--KAGS 122
DB 63 YNFRGFRLQAMIFAIIEINSSPALLPNTLTGYRIFDTCNTVSKALEATLSFVAQNKIDS 122
QY 123 RDIAYCNYTQYQRPVLAVIGHSEELAMVTKKFSFPLMPQVSYGASMEILISARETPPS 182
DB 123 LNLDFCNCSEHIFPTIAYVATGSGVAVANLLGLFPIPOVSYAASSSRLLSNKQFYS 182
QY 183 FFRTPSDRVOQLTAABELLQERGMVMVAALGSDDEYGRGCLISFSLAAARGICIAHGSL 242

```

```

DB 183 FLRTIPNDHQATAMADIIIEYFRMNVGTIAADDDYGRPGIEKFEFEAEERDIDICIDFSEL 242
QY 243 VPLPRADSRKQKQDVHONQSSVQVLLFASNAHALFNYSISSRLSPKVVASEA 302
DB 243 I---SQYDDEEIOHVEVIQNSTAKYIVFSSGPDLEPLIKETVRNITKYLASEA 298
QY 303 WLTSDLVMGLPGMAOMGTVLGFLQGAQLHFPPQV--KTHLALATDPAFSCALGERE--- 358
DB 299 MASSSLIMPOYFHVYGGTIGFALKAGQIPGPRELKVHPRKSHNCFALPEMETPNC 358
QY 359 -----QGLEBDVVGRCPQCD-----CITLQNVSA-----GLNHQ- 389
DB 359 HLQEGAKGPLPVDPLRGHEES--GDRPSNSTAFRLPCTDENISSVETPIDYTHLRI 416
QY 390 TFSVYAAYSYAQAALHNTLQC-----NASGCPADQVPYPMQLEMMYLTFF-HVGL 440
DB 417 SYNVLAVYSIAHLAQDLYTCLPGRLFTNGS-CADIKKVAWQVLKALRLHNFNNNGE 475
QY 441 PLRFDSSGNVDMEXDLKLM---VMQGSVRLHDVGRFN-GSLRTERL-----KIRWHTSD 491
DB 476 QYTFDECGDLVGNISITMHLSPEDGSIV-FKEVGYVNVYAKKGERLITNEKILMSGFS 534
QY 492 NQKPVSRCSROQOEGQYRR-VKGFHSCCYDCVDCBAGSYRONPDDIACFPQODEWSPER 550
DB 535 REVPSNCSRDCLAGTRKGIIEGEPTCCFECVCEPDGYSDETDAACNKKCPDDFWSMEN 594
QY 551 STRCFRRSRFLANGEPVALLLLLSLALGLVLAALGFVHHRSDPLVQASGGLA--- 607
DB 595 HTSICAKIEIEFLSWTEPPGIALTLFAVLGIFLTAFLVGLVFTRNTPIVKAITNELSYLL 654
QY 608 CEGVLCGLVLT-SVLPFGPGSPARCLAQOPLSLPLTGLSTFLQAABIFV--ESEL 664
DB 655 LPSLCC---CPSSSLFPIGPDMWCTKRLROPAGISVLTLSCLVLTNRLLVFEAKI 710
QY 665 PLS-----WADRLSGCLRGPMAMLVLLAMVEVALCTWYVAPEPVEVTDMMHLPTEAL 719
DB 711 PTFHRKMWGLNQ-----FLVFLCTMQIVICIMLYTAPSSYRNQGELEDEIIF 762
QY 720 VHCRTSRVSPGLAHATNATLAFLCFLGTFLVRSOPGCTYNRARGLTMTMLAYFTWSPV 779
DB 763 ITCHEGSLMALGFLIGYTCLLAALCFEPFAFSRKLPENFNAKFTFPMSLFFIWMISFI 822
QY 780 PLIANVQVLRPAVOMGALLCVGIIAFLPRLPCYLLMRPGJLNTPE 827
DB 823 PAYASTYKFSVAVEVAIALAASFGLACIFPNKIYILFRPSRNTIE 870

```

RESULT 8  
 US-08-484-159-7  
 ; Sequence 7, Application US/08484159  
 ; Patent No. 6313146  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bradford C. Van Wageningen  
 ; APPLICANT: Manuel F. Balandrin  
 ; APPLICANT: Eric G. Del Mar  
 ; APPLICANT: Edward F. Nemeth  
 ; TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 ; MOLECULES  
 ; NUMBER OF SEQUENCES: 20  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Lyon & Lyon  
 ; STREET: First Interstate World Center  
 ; STREET: Suite 4700  
 ; STREET: 633 West Fifth Street  
 ; CITY: Los Angeles  
 ; STATE: California  
 ; COUNTRY: USA  
 ; ZIP: 90071  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS

```
SOFTWARE: FASTSEQ
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,159
FILING DATE: 7 June, 1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below: 9
APPLICATION NUMBER: 08/353,784
FILING DATE: 9 December, 1994
APPLICATION NUMBER: PCT/US/94/12117
FILING DATE: 21 October, 1994
APPLICATION NUMBER: U.S. 08/292,827
FILING DATE: 23 August, 1994
APPLICATION NUMBER: U.S. 08/141,248
FILING DATE: 22 October, 1993
APPLICATION NUMBER: U.S. 08/009,389
FILING DATE: 23 February, 1993
APPLICATION NUMBER: U.S. 08/017,127
FILING DATE: 12 February, 1993
APPLICATION NUMBER: U.S. 07/934,161
FILING DATE: 21 August, 1992
APPLICATION NUMBER: U.S. 07/834,044
FILING DATE: 11 February, 1992
APPLICATION NUMBER: U.S. 07/749,451
FILING DATE: 23 August, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Hebert, Sheldon O.
REGISTRATION NUMBER: 38,179
REFERENCE/DOCKET NUMBER: 214/101
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 1078 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-484-159-7

Query Match      23.6%; Score 1068.5; DB 4; Length 1078;
Best Local Similarity 30.3%; Pred. No. 2.6e-93;
Matches 269; Conservative 156; Mismatches 366; Indels 97; Gaps 26;

QY 12 WALL---HPTGALCLISQDRLKMGDYVLGSLFPLG---EAEAGLASRRTPSSPVCTR 64
DB 8 WVLALTLVHTSAVGP---DORAQKGDIIIGGLPIHFGVAKKODLKS--RPESVEGIR 62
QY 65 PSSNGLMALMKMAVEREINNKSDLLPGLRIGYDLPDTCSEPVVAMKDSIMPLA--KAGS 122
DB 63 YNFRGFRMLQAMIFIEEINSSPALLPMTLIGYRIFTICNTVSKALETTLSTFAONKIDS 122
QY 123 RDAIAYCNYTOYQPEVLAVIGPHSESLAMVTGKFSFPLMPQVSYGASMELLSARETPS 182
DB 123 LINDFCQCSHEIPTIAVVGATGSGVAVANLLGLFIYIPQVSVASSRLLSNNGQKKS 182
QY 183 FFRTPSPRVOLTAABELLOERGMVVAALGSDDEYGRQGLSIFALAAAGICTAHGCL 242
DB 183 FLRTIPNDEHQTAADIDIEYFRMNVGTIAADDYGRPGIEKFEFEAEERDICTDFSEL 242
QY 243 VPLPADDSRGKVDVLIHQVNOSSVOVLLFASVHAHAALFNVISISRLSPKVVAVSEA 302
DB 243 I---SQYDEBEIGHVEVIONSTAKVIVVSSGPDLEPLKEIVRNNTIGKTLASEA 298
QY 303 WLTSDLVWGLPGMAQGTVLGFLQGAOLHEFPQV--KTHLALATPAFCSALGERE--- 358
DB 299 MASSSLIMPOQFHVHVGGITGFALAAQDIPGFRRELKKVHPKSKVHNQFAKFMETENC 358
QY 359 -----QGLEEDVQRCPCQD-----CITLQNVSA-----GINHQ- 389
DB 359 HLOEGAKGPLVDFTFLRGHEE--GDRFSSNSTAFRPLCTGDENISSVETPYIDYTHIRI 416
```

```
QY 390 TFSYAAVSYVAQALHNTLOC-----NASGCPADPVKPMQLENNYLTFF-HVGC 440
DB 417 SYNYTLAVYSLAHALQDIYTCPLRGGLFTNGS--CADIKKYEAQVLIHGLHRLNTNMGE 475
QY 441 PLRTDSSGNVMEYDLKLM---VMQSVPRLDVGRN--GSLRTERL-----KIRHNTSD 491
DB 476 QVTEDECGDILVGNYSIINMHLSPEDGSIV--FKEVGYNVYAKGERLFINBEKILMGFS 534
QY 492 NOKFVSRCSQCQCGOYVR--VKGFHSCCYOCVDEAGSYRONPDDICTFCGODEWSPER 550
DB 535 REVFPNSCRDCLAGTKGIIIGEPCTCFECVBCPDEYSDETDASCKNCCPDPMNEN 594
QY 551 STRCFRRSRFLWGEPAVLLILLLSIALGLVLAALGLFVHNHSDPLVQASGGPLA--- 607
DB 595 HTSCIAKEIEFLSWTEPFGIALTLFVNLGIFLTFVGLVGFIPKPNNTIVATNRELSYL 654
QY 608 CFGLVLCGLVCL--SVLLPQOPSPARCLAQOPLSHPLTGLCLSTFLQAAEIFV--ESEL 664
DB 655 LFSILC-----CFSSSLFFPIGEPQDMTCRLROPAGISFVLCSICILVKTNRVLLVPSAKI 710
QY 665 PLS-----MADRLSGCLRGPMAMLVLLAMLVBALCTWLVAFPRPVTDHMLPTREAL 719
DB 711 PTFSHRRKMWGLNQ-----FLVFLCTFMQIVICVIMLYTAPBSYRNQELDEITIF 762
QY 720 VHCTRSMVSPGLAHATNATLAFPLGTFELVNSQPCYNRARGLTFRMLAYFITWVSFV 779
DB 763 ITCHEGSLMALGFIIGYTCLLAACFPFAFYSRKLPENFDEAKITFSMLIFLWISFI 822
QY 780 PLIANVOVLPRAVQMGALLCVIGITAAFHLPKCYLLMKRPGCLNTEP 827
DB 823 PAYASTGKEVSAVEVIAIILASFGLLACIFFNKIYIILKPSRNTYE 870

RESULT 9
US-08-485-588-5
Sequence 5, Application US/08485588
Patent No. 5688938
GENERAL INFORMATION:
APPLICANT: Edward M. Brown
APPLICANT: Steven C. Hebert
APPLICANT: Forrest H. Fuller
APPLICANT: James E. Garrettc, Jr.
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: First Interstate World Center
STREET: Suite 4700
STREET: 633 West Fifth Street
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: FASTSEQ
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,588
FILING DATE: 7 June, 1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below: 9
APPLICATION NUMBER: 08/353,784
FILING DATE: 9 December, 1994
APPLICATION NUMBER: PCT/US/94/12117
FILING DATE: 21 October, 1994
APPLICATION NUMBER: U.S. 08/292,827
FILING DATE: 23 August, 1994
```

APPLICATION NUMBER: U.S. 08/141,248  
FILING DATE: 22 October, 1993  
APPLICATION NUMBER: U.S. 08/009,389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017,127  
FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 21 August, 1992  
APPLICATION NUMBER: U.S. 07/834,044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749,451  
FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Heber, Sheldon O.  
REGISTRATION NUMBER: 38,179  
REFERENCE/DOCKET NUMBER: 213/005  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ. ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1085 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-485-588-5

Query Match 23.4%; Score 1060; DB 1; Length 1085;  
Best Local Similarity 30.0%; Pred. No. 1,8e-92;  
Matches 269; Conservative 155; Mismatches 362; Indels 112; Gaps 26;

6 VGLSLMLHRTGAPLCLSLQGLMKGDYVIGLPP--GEA-EEAGLRSTRSSPPVC 62  
10 LIAFTWCTSAVGP-----DQRAQKGIILGGLPIHGVAVXDQDKS--RESEVVC 61  
63 TRFSSNGILMALAMKAAVEINNKSDLLPGLRIGYDLPTCGSEPVVAMKPSIMFLA--KA 120  
62 IRYNFRGRFWLOAMFAIEEINSSPALPMMTLGRIPTCTVSKALEATLSFAVQNKI 121  
121 GSRDIAVCNTYQYOPRVLAIVIGPHSSSELAMVTGKFFSFLMPQVSYGASMELLSARETF 180  
122 DSLINDEFNCSEHPISTIAVAVGATGSGISTAVANILGLFYIPQVSYASSSRLSNKQF 181  
181 PSFPTVSDRQVQLPAAAEELLOEFGMNWVAALGSDDEVROQLSTFSALAAARGICIAHE 240  
182 KSFLLTIPDEHQATAMADILEYFRMNWGTIAADDDYGRPGIEKFRBAERDICIPTS 241  
241 GLVPLPRADDSRLGKQVDVLHQVNOSSVQVLLPFASVHAHALFNYSISSRLSPKVVAS 300  
242 ELI-----SOYDEBEKIQVVEIYQNSTAKIYIVFSSGPLLEIYVRNITGRILWLS 297  
301 EAMLTSDLVMLPGNAQMGTVLGLPQGAQLHEFPQYV-KTHLALATPAFCSAL----- 354  
298 EAMASSSLIAMPDEYFHVVGITIGFGIKAGQIPGFRFLOKVAPRKSVMHNGFAKEFEWETF 357  
355 -----GEREGQL-----BEDVVGQRCPQDCITLON 380  
380 NCHLOEAGAKPLPVDTLRGEHEEGARLSNSPTARPLCTGENTISVETTPMDYTHLR- 416  
381 VSAGLHHQTFESVAAYVSVAQALHNTLOC-----NASGCPADDPVKPQQLNNMN 432  
417 -----ISYVYLAIVSIAHALODIYTCIGRGLFTNGS-CAIKKYEAHQVLYKHLRH 467  
433 LTFHVG-GLPLRFSSGNVMEYDLKW---VMQGSVPLHLDVGRFN-GSLRTERL--- 483  
468 LNFSTNMGEQVTFDECGDLAGNYSIINMHLSPEDSIV-FKEVGYVNAVAKKGERLFIN 526  
484 -KIRWHTDNQKVRBCSGRCOGEQVRR-VKGFHSCVDVCVCEAGSYRQNDLDACTFC 541  
527 EKILWSGSRREVPSFNCSDRCCLAGTRKGIIEBEPCTCCFVCPGDEESDETASACXKC 586  
542 GODEWSPERSTRCFRRSRFLAMGEPVALLLLLSLALGLVLAALGLFVHHRDSPLVQA 601

DB 587 PDDFWSNENHTSCIAKEIEFLSWTEPFGIALTLFAVLGIFLFAVLGVFIKRNTPIVA 646  
QY 602 SGGPLA---CRLVTLGLVCL-SVLLFPGQSPAPACLAQOPLSHPLTGCLSTLQDAE 657  
DB 647 TNRELSTYLLPLSLC-----CFSSSLFFIGEPDQWTCRQRPAGFISFVLCISCIIVKTR 702  
QY 658 IFV--ESELPS-----WADRUSGCLRGPMMLVYLLAMLVVALCTMYVLPPEVVD 710  
DB 703 VILVEBAKIPTSFHRKMGLNLO-----FLVFLCTFMQIVICAIWNTAPSSYRN 754  
QY 711 WHMLPTEAL-VHCRTSRVWSFGLAHATNATLAFCLCFGLFVRSQPGCVNRRAGLTFAML 769  
DB 755 -HELEDEILFIICHGSLMAGFLIGYCLLAALCFFAFNRKLPENPNEAKFITFSML 813  
QY 770 AVFITVSGFVPLANVOVLRPAVOMGALLLCVGLIAAFLHPRCYLLMROGLMTP 827  
DB 814 IFFIVWISFIPAYASTYGVKFSVAVVIAIILASFLILACIFENKVIILFKPSRNTIE 871

RESULT 10  
US-08-484-565-5  
Sequence 5, Application US/08484565  
Patent No. 5763569  
GENERAL INFORMATION:  
APPLICANT: Edward M. Brown  
APPLICANT: Steven C. Hebert  
APPLICANT: James E. Garrett, Jr.  
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
NUMBER OF SEQUENCES: 20  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: First Interstate World Center  
STREET: Suite 4700  
STREET: 633 West Fifth Street  
CITY: Los Angeles  
STATE: California  
COUNTRY: USA  
ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: FASTSEQ  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/484,565  
FILING DATE: 7 June, 1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
PRIOR APPLICATION DATA: including application  
PRIOR APPLICATION DATA: described below: 9  
APPLICATION NUMBER: 08/353,784  
FILING DATE: 9 December, 1994  
APPLICATION NUMBER: PCT/US/94/12117  
FILING DATE: 21 October, 1994  
APPLICATION NUMBER: U.S. 08/292,827  
FILING DATE: 23 August, 1994  
APPLICATION NUMBER: U.S. 08/141,248  
FILING DATE: 22 October, 1993  
APPLICATION NUMBER: U.S. 08/009,389  
FILING DATE: 23 February, 1993  
APPLICATION NUMBER: U.S. 08/017,127  
FILING DATE: 12 February, 1993  
APPLICATION NUMBER: U.S. 07/934,161  
FILING DATE: 21 August, 1992  
APPLICATION NUMBER: U.S. 07/834,044  
FILING DATE: 11 February, 1992  
APPLICATION NUMBER: U.S. 07/749,451  
FILING DATE: 23 August, 1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Heber, Sheldon O.  
REGISTRATION NUMBER: 38,179



Query Match 23.4%; Score 1060; DB 2; Length 1085;  
 Best Local Similarity 30.0%; Pred. No. 1.8e-92;  
 Matches 269; Conservative 155; Mismatches 362; Indels 112; Gaps 26;

```

QY 6 VIGLSLWALLHPGTGAPLCLSQRLMKGDYVIGLGPL--GEA--EBAGLRSTPRSSVVC 62
DB 10 LIAFSTWCTSAVGP-----DQRAQKGDIIIGLGLPIHFGVAVVDQDLKS--RESEVVC 61
QY 63 TRFSSNGLLMALMAKMAVEINNKSDLLPGLRLGYDLPDTCSEBPVAMKPSLMFLA--KA 120
DB 62 IRNFRGRFMLOAMFAIEEINSSPALPNNMTLGRIFDTCNTVSKALEATLSFAQNKI 121
QY 121 GSRDIAAYCNYTOYOPRYLAVIGPHSSSELAWTKGFSSFFLMPQVSYGASMELLSARETF 180
DB 122 DSLNIDFCNCSEHLPSTIAVVGATGSGISTAVANLGLFYIPQVSYASSSRLLSKNQF 181
QY 181 PSFFRTVSDRVQLTAAELLQDFGNNVVALGSDDEYRGQSLSPSALAARGICIAHE 240
DB 182 KSFLRTIPDEHQATAMADIIIEYFRMNMVGTIAADDYGRPGIERFREAEERDIDIFS 241
QY 241 GLVPLPRADDSRLGKVODVLHQVNOSSVOYVLLPASVAHAHLFNYSISSRLSPKVMAS 300
DB 242 BLI-----SOYSEBEKIQOVVEVIONSTAKVIVFSSGPDLEPLKEIVARNITGRILWAS 297
QY 301 EAMLTSDIWMGLPGMAOMGTVLGFLQGAQLHEFPQYV-KTHLALATDPAFCSAL----- 354
DB 298 EAMASSSLJAMPEYHVVGGTIGFLKAGQIGFREFLOKHPKRSYVNGFAKEWEERTF 357
QY 355 -----GEREQL-----BEDVQGRCPQDCDITLON 380
DB 358 NCHLOEAGAKGPLVDFTLRGHEEGARLSNSPTAFRPLCTGEBNISVETPYMDYTHLR- 416
QY 381 VSAGLNHHQTFSEVAAYVSVAQALNHLNQLQ-----NASCPADDPKPKQMLENNMN 432
DB 417 -----ISVNYLAVYSIAHALDITYTLCIGRLFTNGS--CADIKKEAQQVKLHLH 467
QY 433 LTFHVG-GLPLRFDSGGVDMEDYDKLW---WQGSVPLRLHVGFRN--GSLTEPL---- 483
DB 468 LNFNTMGBQVTFDECGDLAGNYSIINMHLSEBDSIV-FKEVGYVNVAKKGERLFIN 526
QY 484 -KIRNHTSDNQKPVSRCSRQCEGOVRR-VKGFHSCCYDCVDCGASGRQNDPIACTFC 541
DB 527 EKILMSGFSREVPFNCSDCLAGTRKGIIEGEPFCCEGCEVCDEGDEYDETDASACDKC 586
QY 542 GODEMSPSRSTCFRRRSRFLAMGEPVALLLLLSLALGVLVALGLFVHHRDSPLYQA 601
DB 567 PDDFWSNENHTSCIAKEIEFLSWTEPPGIALTLFVLGIFLTAFLVGLVIFKFRNTPYVA 646
QY 602 SGGPLA---CFGLVCLGLVCL-SVLLFPQPSPARCLAQOPLSHLPLTQCLSTLFLQAAE 657
DB 647 TNRELSTYLLFELLC-----CFSSSLFFIGEPDQWTCRLQRPAGISFVLCISCIIVKTR 702
QY 658 IFV--ESELPLS-----WADRLSGCLRGFWANLVLLAMLVEVALCTWYLVAPPEVYTD 710
DB 703 VLLVFEAKIPTSFHKKMGLANIQ-----FLVFLCTFMQIVICAIVLNTAPSSRYN 754
QY 711 WHMLPTLAL-VHCRTRSWVSFGLAHATNTATLAFCLPLGLFVLVRSQPCGNRARGLTAML 769
DB 755 -HEDEDEIFITCHEGSLMALGLIYCTCLLAICFFPAFKSRKLPENNEKFTTFSL 813
QY 770 AYLFWVGFVPLLANVQVILRPAYOMGALLLCVLGILAAFLPRCYLMLRQGLTPE 827
DB 814 IFFIWMISFIAPYASTYTKFVSAVEVIALAASRGLLACIFPNKYIIILFKSRNTIE 871

```

US-08-943-986-5  
 Sequence 5, Application US/08943986  
 Patent No. 5962314  
 GENERAL INFORMATION:  
 APPLICANT: Edward M. Brown  
 APPLICANT: Steven C. Hebert  
 APPLICANT: James E. Garrett, Jr.

TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 TITLE OF INVENTION: MOLECULES  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA  
 ZIP: 90071

COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: FASTSEQ  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/943,986  
 FILING DATE: 03-OCT-1997  
 CLASSIFICATION: 530

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/484,565  
 FILING DATE: 7-June-1995  
 APPLICATION NUMBER: 08/353,784  
 FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US/94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991

ATTORNEY/AGENT INFORMATION:  
 NAME: Hebert, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REFERENCE/DOCKET NUMBER: 213/006  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEFAX: (213) 955-0440  
 TELEX: 67-3510

INFORMATION FOR SEQ ID NO: 5:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1085 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein

US-08-943-986-5

Query Match 23.4%; Score 1060; DB 2; Length 1085;  
 Best Local Similarity 30.0%; Pred. No. 1.8e-92;  
 Matches 269; Conservative 155; Mismatches 362; Indels 112; Gaps 26;

```

QY 6 VIGLSLWALLHPGTGAPLCLSQRLMKGDYVIGLGPL--GEA--EBAGLRSTPRSSVVC 62
DB 10 LIAFSTWCTSAVGP-----DQRAQKGDIIIGLGLPIHFGVAVVDQDLKS--RESEVVC 61
QY 63 TRFSSNGLLMALMAKMAVEINNKSDLLPGLRLGYDLPDTCSEBPVAMKPSLMFLA--KA 120
DB 62 IRNFRGRFMLOAMFAIEEINSSPALPNNMTLGRIFDTCNTVSKALEATLSFAQNKI 121
QY 121 GSRDIAAYCNYTOYOPRYLAVIGPHSSSELAWTKGFSSFFLMPQVSYGASMELLSARETF 180
DB 122 DSLNIDFCNCSEHLPSTIAVVGATGSGISTAVANLGLFYIPQVSYASSSRLLSKNQF 181

```



```

Db      358 NCHLOEAGKPLPVDFTFLRGHEEGARLSNPTAFRLPCTGEEINSSVETPYMDYTHLR- 416
      381 VSAGLNHHOTFSVYAAYVVAQALNHTLOC-----NASGCPADPYKPMQLENNYN 432
      417 -----ISYVVYLAIVSIAHALQDIYTCIPGRGLFTNGS-CADIKKVEAWQVGLKLRH 467
      433 LTFHVG-GLPLRFDSGGVNDMEYDLKLM---VMQGSVRLHVGREN-GSLRTERL----- 483
      468 LNFSTNMGEOVTFDECGDLAGNYSTINMHLSPEDSIV-FKEVGYNNYAKKGERLFTND 526
      484 -KIRHMTSDNQKPVSRCSROCEQGVRR-VKGFHSCCYDVCDEAGSYRONPDDIACTEC 541
      527 EKLWMSGFRREVFPNSCRDCLAGTRKGIIEGPCTCECVCPDEYSDETDASACDCK 586
      542 GGDWSPERSTRCFRRSRFLAMGERAVLLLLSLALGLVLAALGLVHHRDSLVQA 601
      587 PDDFNSNENHTSCIAIEIFLSTEFEGALTLFAVLGFLTAFLVGVFKIKRNPDIYVA 646
      602 SGGPLA---CFGLVCLGLVCL-SVLLFPQPSPARCLAQOPLSHPLTGTCLSTLFLQAAE 657
      647 TTRHLSYLLFSLLC-----CFSSSLPFTGEPODMTRLOPAPGISFVLCISCLIVKTKR 702
      658 IFV--ESELPLS-----MADRISGLRGPMWLVLMLAVEALCTWYLVAPPEVVD 710
      703 VLVFEAKIPTSFHRKMGALNQ-----FLVFLCTFMQIVICAILNLTAAPSSYN 754
      711 WMLPTEAL-VHCRTRSVSPGLAHTNATLAPLCPLGLTVRSOPGCNRRAGLTFAML 769
      755 -HELDEIIFITCHEGSLMALGFLIGYTCLLAICFFPAFKSRKJLENENAKFTFSWL 813
      770 AAFITVSVPLLANQVVLRAVOWGALLLCVLGLAAPHLPRLCYLLMRQGLMTP 827
      814 IFFIWIISTIPAYASTYKGFVSAVEYIALILASFGILACIFRNKYIILFKESRNTIE 871

```

```

RESULT 14
US-08-484-719B-5
Sequence 5, Application US/08484719B
Patent No. 6031003
GENERAL INFORMATION:
APPLICANT: Edward F. Nemeth, Edward M.
APPLICANT: Brown, Steven C. Hebert,
APPLICANT: Bradford C. Van Wagenen,
APPLICANT: Manuel F. Balandrin,
APPLICANT: Forrest H. Fuller, Eric G.
APPLICANT: Delmar, Scott T. Moe
TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSER: Lyon & Lyon
STREET: First Interstate World Center
STREET: Suite 4700
STREET: 633 West Fifth Street
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: MS Word
SOFTWARE: FASTSEQ for Windows Version 3.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,719B
FILING DATE: 7 June, 1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/353,784
FILING DATE: 9 December, 1994
APPLICATION NUMBER: PCT/US/94/12117
FILING DATE: 21 October, 1994
APPLICATION NUMBER: U.S. 08/292,827

```

```

      FILING DATE: 23 August, 1994
      APPLICATION NUMBER: U.S. 08/141,248
      FILING DATE: 22 October, 1993
      APPLICATION NUMBER: U.S. 08/009,389
      FILING DATE: 23 February, 1993
      APPLICATION NUMBER: U.S. 08/017,127
      FILING DATE: 12 February, 1993
      APPLICATION NUMBER: U.S. 07/934,161
      FILING DATE: 21 August, 1992
      APPLICATION NUMBER: U.S. 07/834,044
      FILING DATE: 11 February, 1992
      APPLICATION NUMBER: U.S. 07/749,451
      FILING DATE: 23 August, 1991
      ATTORNEY/AGENT INFORMATION:
      NAME: Douglas C. Muddock
      REGISTRATION NUMBER: 37,549
      REFERENCE/DOCKET NUMBER: 213/007
      TELECOMMUNICATION INFORMATION:
      TELEPHONE: (213) 489-1600
      TELEFAX: (213) 955-0440
      TELEX: 67-3510
      INFORMATION FOR SEQ ID NO: 5:
      SEQUENCE CHARACTERISTICS:
      LENGTH: 1085 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
      MOLECULE TYPE: protein
      US-08-484-719B-5

Query Match      23.4% Score 1060; DB 3; Length 1085;
Best Local Similarity 30.0%; Pred. No. 1,86-92;
Matches 269; Conservative 155; Mismatches 362; Indels 112; Gaps 26;

      6 VLGLSLMALHPGTGAPRLCSQGLRMKGDYVGLFPL--GEA--EAGLRSTRSPSPVC 62
      10 LLAFSTWCTSAVGP-----DQRAQKGDIIILGLFPIHFGVAVXDQLKS--RESYEC 61
      63 TRFSSNGILMALAMMAVEINNKSDLLPGLRLGYDLFDTCSEPVVANKPSLMFLA--KA 120
      62 IRYNRGFRWLQAMFAIEEINSSPALPNMTLGYRIDTNTVSKALEATLSFVAONKI 121
      121 GSRDIAAYCONTOVQPRVAVIAPHSSSELAWTKGFSFPLMPVSYGASMLLSARETF 180
      122 DLANDEFCNCSERHPSTIAVAVGATGSTRVANLLGLFYIPQVSIVSSSRLLSNKOF 181
      181 PSFPTVPSDRVQLTAAAEILOEFGMNWVAALGSDDEYGRQGLSTFSALAAARGICIAHE 240
      182 KSFRLTIINDEHQATMADIIEYFRMNWGTIAADDDYGRGIEKFRREABERDICIIDS 241
      241 GLVPLPRADDSRLGKVQVQLHQNQSSVQVVLFPASVHAALFNYSISSRLSPRVVNS 300
      242 ELI-----SQYDDEEKIQQVVEIIONSTAKVIVFSSGPDLEPLIEIYRNRTIGRIWLS 297
      301 EAMLTSDLVWGLPGAGQGVTLGFGAQLHEFPQVY-KTHLALATPAPFSAAL----- 354
      298 EAMASSSLIAMPYFHVGVGTIGLKGAGQIPGFRFLQKVPKRSVANGKFEKFEWETTF 357
      355 -----GEREOGL-----EEDVVGORCPQDCDITLON 380
      358 NCHLOEAGKPLPVDFTFLRGHEEGARLSNPTAFRLPCTGEEINSSVETPYMDYTHLR- 416
      381 VSAGLNHHOTFSVYAAYVVAQALNHTLOC-----NASGCPADPYKPMQLENNYN 432
      417 -----ISYVVYLAIVSIAHALQDIYTCIPGRGLFTNGS-CADIKKVEAWQVGLKLRH 467
      433 LTFHVG-GLPLRFDSGGVNDMEYDLKLM---VMQGSVRLHVGREN-GSLRTERL----- 483
      468 LNFSTNMGEOVTFDECGDLAGNYSTINMHLSPEDSIV-FKEVGYNNYAKKGERLFTND 526
      484 -KIRHMTSDNQKPVSRCSROCEQGVRR-VKGFHSCCYDVCDEAGSYRONPDDIACTEC 541
      527 EKLWMSGFRREVFPNSCRDCLAGTRKGIIEGPCTCECVCPDEYSDETDASACDCK 586

```

QY 542 GDEWSPERSTRCPFRRSRFLAMGEPVALLLLLSLALGLVLAALGFVHHRSPLVOA 601  
 DB 587 PDDFWSNMHTSCIAKEIEFLSWTEPFGIALTLFAVLGFLFAFGVFIKFRNTPIVKA 646  
 QY 602 SGGFLA---CFGLVCLGLVCL-SVLLPFGQSPARCLAQOPLSHLPLTGCLSTFLQAAE 657  
 DB 647 TNRRLSYLLFLSLIC-----CFSSSLFFIGEPQDMTCRLRQPAFGISFVLICISCLLVKTNR 702  
 QY 658 IFV--ESLPLS-----WADRLSGCLRGPMALVLLMLVVALCTMYLVAAPREVTD 710  
 DB 703 VLVLEAKIPTSFHRKMWGLNQ-----FLVFLCTMQIVICAIWLTAPSSYRN 754  
 QY 711 WHMLPTEAL-VHCRTRSVSFGLAHATNATLAFLCFLGFLTVRSQPCYNRARGLTFAML 769  
 DB 755 -HELEDEIFITCHGSLMALGFLGYTCLLAALCFPAFKSRKLPENFNEAKFTIFSML 813  
 QY 770 AYFTWVSFVPLLANVQVLRPAVOMGALLCVLIGILAAFHLPRLCYLLMRQGLTPE 827  
 DB 814 IFFIWMISFIPAYASTGYKFSVAVEVIALAASFGLLACIFPNKYIILFKRSRTIE 871

# RESULT 15

US-08-484-159-5  
 ; Sequence 5, Application US/08484159  
 ; Patent No. 6313146  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bradford C. Van Wagenen  
 ; APPLICANT: Manuel F. Balandrin  
 ; APPLICANT: Eric G. Del Mar  
 ; APPLICANT: Edward F. Nemech  
 ; TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 ; NUMBER OF SEQUENCES: 20  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Lyon & Lyon  
 ; STREET: First Interstate World Center  
 ; STREET: Suite 4700  
 ; STREET: 633 West Fifth Street  
 ; CITY: Los Angeles  
 ; STATE: California  
 ; COUNTRY: USA  
 ; ZIP: 90071  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: FASTSEQ  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/484,159  
 ; FILING DATE: 7 June, 1995  
 ; CLASSIFICATION: 435  
 ; PRIOR APPLICATION DATA:  
 ; PRIOR APPLICATION DATA: including application  
 ; PRIOR APPLICATION DATA: described below: 9  
 ; APPLICATION NUMBER: 08/353,784  
 ; FILING DATE: 9 December, 1994  
 ; APPLICATION NUMBER: PCT/US/94/12117  
 ; FILING DATE: 21 October, 1994  
 ; APPLICATION NUMBER: U.S. 08/292,827  
 ; FILING DATE: 23 August, 1994  
 ; APPLICATION NUMBER: U.S. 08/141,248  
 ; FILING DATE: 22 October, 1993  
 ; APPLICATION NUMBER: U.S. 08/009,389  
 ; FILING DATE: 23 February, 1993  
 ; APPLICATION NUMBER: U.S. 08/017,127  
 ; FILING DATE: 12 February, 1993  
 ; APPLICATION NUMBER: U.S. 07/934,161  
 ; FILING DATE: 21 August, 1992  
 ; APPLICATION NUMBER: U.S. 07/834,044  
 ; FILING DATE: 11 February, 1992  
 ; APPLICATION NUMBER: U.S. 07/749,451  
 ; FILING DATE: 23 August, 1991

; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Heber, Sheldon O.  
 ; REGISTRATION NUMBER: 38,179  
 ; REFERENCE/DOCKET NUMBER: 214/101  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (213) 489-1600  
 ; TELEFAX: (213) 955-0440  
 ; TELETYPE: (213) 489-1600  
 ; INFORMATION FOR SEQ ID NO: 5:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 1085 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; US-08-484-159-5

Query Match 23.4%; Score 1060; DB 4; Length 1085;  
 Best Local Similarity 30.0%; Pred. No. 1,86-92;  
 Matches 269; Conservative 155; Mismatches 362; Indels 112; Gaps 26;

QY 6 VLGSLMALHPGAGAPLCLISQOLRMKGQVYVGLFPL--GEA-EEAGLSRTRPSSPVC 62  
 DB 10 LIAFTWCTSAVGP-----DQRAQKGDIIIGSLFPIHFGVAVKDDLS--RPEVBC 61  
 QY 63 TRFSSNGILVAMKMAVEEINNKSDLLPGLRLGYDLFTGSEPVVAMKSLMFLA--KA 120  
 DB 62 IRVNFGRPMLOAMIPALIEEINSPALLPMNTLGYRIFDTCNTVSKALEATLSFVAQNKI 121  
 QY 121 GSRDIAAYCNTYQYQPRVAVIGHSESLAMVTGKFSFPLMPVSGAGMELISAETP 180  
 DB 122 DSLWLDEFCNCESEHPIPTIAVAGTSGISPAVANLLGLFYIPDVSVASSSRLSNKQF 181  
 QY 181 PSFRTVPSDPRVQTTAAELLOEFGMNVAALGSDDEYGRGSLISFALAAAGICIAHE 240  
 DB 182 KSLFRTIPNDEHQTAADIIETPRMNVGTIADDDYGRPGIEKFEKEBERICIDFS 241  
 QY 241 GLVPLPRADSRGLKQVDVLHQVNSSVQVLLFASVAAHALFNYSISSRLSPKVVAS 300  
 DB 242 ELI----SOYSDEBKIQOVVEVIONSTAKYIVVSSGPDLEPLKEIYRRNITGRIMLAS 297  
 QY 301 EAWLTSDLVWGLPMAOMGVYVGLQGAQLHEPQV--KTHLALADPAFCSL----- 354  
 DB 298 EAWASSSLIAMPYFHVAVGTIGLAKAGQIPGRREFLQKVRPKSVHNGFAKEFWETP 357  
 QY 355 -----GEREQL-----EBDVQORCPQCCITLON 380  
 DB 358 NCHIQEAGKPLPYDTLRGHEBGAFLNSPTAFRLCTGEBEISVSERTPYMHTLR- 416  
 QY 381 VSAGLNHQTFSSVYAAVYAQAALHNTLQC-----NASGCPADDPVPMQLLENMYN 432  
 DB 417 -----ISYNYVLAVYSTAHALQDITYTCIPGRGLFTNGS--CADIKKVEAMQVLKHLRH 467  
 QY 433 LTFHVG-GPLRFPSSGNDMEYDLKM--WNGSVPRLHDVGRFN-GSLRTREL----- 483  
 DB 468 LNFSSNGEQVTFPECBDLAGNYSIIWHLSPEDGSIV-FKEVGYVYVAKKGRRLTIND 526  
 QY 484 -KIRWHTSDNOKPVSRCQOQEGQVR-VKGFHSCYDVCDCAGSYRQNPDIACFTFC 541  
 DB 527 EKILMSGFREVFPNSNCRDCLAGTRKGIIEGEPTCFCEVCEGDEGYSDETDASADKC 586  
 QY 542 GDEWSPERSTRCPFRRSRFLAMGEPVALLLLLSLALGLVLAALGFVHHRSPLVOA 601  
 DB 587 PDDFWSNMHTSCIAKEIEFLSWTEPFGIALTLFAVLGFLFAFGVFIKFRNTPIVKA 646  
 QY 602 SGGFLA---CFGLVCLGLVCL-SVLLPFGQSPARCLAQOPLSHLPLTGCLSTFLQAAE 657  
 DB 647 TNRRLSYLLFLSLIC-----CFSSSLFFIGEPQDMTCRLRQPAFGISFVLICISCLLVKTNR 702  
 QY 658 IFV--ESLPLS-----WADRLSGCLRGPMALVLLMLVVALCTMYLVAAPREVTD 710  
 DB 703 VLVLEAKIPTSFHRKMWGLNQ-----FLVFLCTMQIVICAIWLTAPSSYRN 754  
 QY 711 WHMLPTEAL-VHCRTRSVSFGLAHATNATLAFLCFLGFLTVRSQPCYNRARGLTFAML 769

Db 755 -HELEDEIIFITCHESSIMALGFLIGYTCILAAICFFAFKSRKLPENFNEAKFITFSWL 813  
Qy 770 AVEITWVSFVPLLANVQVVLRAVOMGALLCYLGLIAAFHLPRCYLLMRQSGINTPE 827  
Db 814 IFFIYWISFIPAYASTYGRKFSASAEVIAIILASFGILLACIFENKVIYIILFKPSRNTIE 871

Search completed: May 11, 2004, 15:30:34  
Job time : 22.1574 secs

**THIS PAGE BLANK (USPTO)**